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Acute Psychiatric Bed Need Planning: Issues and Methodologies

U.S. DEPARTMENT OF
HEALTH & HUMAN SERVICES
Public Health Service
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Acute Psychiatric Bed Need Planning: Issues and Methodologies

Methodological Note No. 6

Prepared by
Mareasa R. Isaacs, Ph.D.
Consultant

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INTRODUCTION

In 1980, the Alpha Center published A Health Planner's Guide to Acute Psychiatric Bed Need Planning by Alan Bayer (1). This document offered guidance to health planners who were frequently asked to "make decisions on applications for new psychiatric beds, conversions of medical-surgical beds, community residential centers and, in general, assume leadership in designing a mental health system" (p. 1). Bayer asserted that planners were asked to make such decisions in the face of "insufficient data, competing treatment philosophies about the purposes of hospitalization, the lack of a recognized acute psychiatric bed methodology, political pressures from communities for more services, and the need to balance the short-term role of the general hospital with the long-term goal of a non-hospital oriented treatment system" (p. 1).

Bayer's monograph served to advance psychiatric bed planning methodology in three key ways. First, he viewed inpatient psychiatric bed planning from a strategic perspective, noting that "a determination as to the desired number of acute beds should fit within a broader strategy of re-shaping the mental health treatment system" (p. 3). Second, he articulated inpatient policies which contain value judgments and planning assumptions that reflected state-of-the-art psychiatric treatment and have subsequently received additional empirical substantiation. The planning assumptions and value judgments proposed by Bayer are:

- Mental health services should be provided in the least restrictive environment.
- Mental health services should be provided in a manner which supports the residual health of the client.

- Patients should be maintained in their communities.
- Hospitalization should be considered an extreme form of therapeutic intervention and should be used only when patients are a threat to themselves or others, or require 24-hour supervision or need to be monitored during the initial stages of chemotherapy.
- Hospitalization should be kept to a minimum.
- Inpatient psychiatric hospitalization is not curative in and of itself, but is only a tool in patient management.
- Citizens should have a voice in decisions affecting their health systems.
- Services should be delivered in a cost-effective manner.
- If hospitalization is necessary, admission to a psychiatric unit of a general hospital or private psychiatric hospital for acute distress is preferable to admission to a regional state mental hospital, because psychiatric units in community hospitals tend to have higher staff/patient ratios and to provide more active treatment programs.
- All hospitals providing inpatient psychiatric services must be part of a total mental health system.
- Reliance on general hospital psychiatric units or psychiatric hospitals is based, in part, on the short-term strategy to reallocate the existing public resources now tied to state mental hospitals.
- In an era of scarce resources, the most severely disabled should be treated first.

Bayer concluded his listing of value judgments by asserting: "These assumptions reflect the philosophic commitment to a community mental health model, in which a continuum of care exists, and the general hospital is viewed as a supplementary community resource" (pp. 5-6).

Finally, Bayer used the context of these assumptions in devising a "bed-planning" formula that was a variation of the Hill-Burton formula, indicating that "when the assumptions about the role of hospitalization are

tightly defined, a planner can use the current demand for acute inpatient services as a basis for structuring change within the total treatment system" (p. 3).

Regrettably, health planners, institutional planners, and others caught up in the daily world of Certificate of Need (CoN) development and decision-making often adapted Bayer's recommended bed-planning methodology without sufficient consideration of the policy and strategic context in which the formula was nested. The utilization-based methodology recommended by Bayer was one of very few available in 1980, and it has been widely used by health planners and others interested in the development of acute psychiatric beds. However, without the restrictive policies and strategic issues that Bayer articulated, utilization methodologies tend to perpetuate inefficiency and maintain the status quo of the service delivery structure and, according to Warheit and Auth (2), are "inappropriate for planning present or future mental health services" (pp. 6-7). Unfortunately, existing inpatient bed planning methodologies continue to rely on prevailing utilization as the basis for projection, rather than encourage reduction of hospital-based mental health treatment. The current orientation of health planning for psychiatric inpatient services is criticized in a recent survey of state health planning and development agencies (3):

> Planning methods used are generally simple, cheap, unreliable and inconsistent from state to state.... These results should be grounds for concern given the unanimous judgment of evaluation researchers that reliance on any single need assessment method, and particularly reliance on either historical utilization or bed-to-population methods is a 'recipe for chaos'.... Knowledge generated by needs assessment research has not diffused adequately to the planners and policymakers explicitly charged

> with directing the development of acute psychiatric services.... From a public health perspective,... the development of community-based mental health care may be limited by planning methods heavily dependent on past utilization of widely varying bed to population ratios (pp. 12-15).

The present document is an attempt to update the state-of-the-art in acute psychiatric bed need methodology since the publication of Bayer's paper. Consistent with the original Guide, the primary intended audience of this methodological review is health planners. Nevertheless, the content is relevant to local and state mental health agency planners and administrators who are attempting to reduce and optimize inpatient services.

It must be emphasized that this document builds on the policy and strategic context presented by Bayer, and the criteria and standards Bayer suggested for CoN review remain valid. Consistent with Bayer's guide, this document is grounded on the assumption that acute psychiatric bed planning must not occur in isolation, but rather as an intrinsic component within a comprehensive mental health system. Major developments in cost-effective, community-based alternatives to inpatient treatment have occurred since the publication of Bayer's work. These advances are important for health planners and others to be aware of since they drive the state-of-the-art beyond that described in 1980.

The state-of-the-art in mental health planning is based on the concept of a comprehensive mental health system that includes a "continuum of care," an array of accessible and responsive mental

health services that are interrelated and integrated from less to more intensive and are delivered in settings ranging from least to most restrictive. The continuum of care reflects a policy that the mental health system be driven by the needs of clients and their families, rather than by the needs or preferences of facilities and providers. By defining services in a continuum, planners can readily grasp the interactive nature of mental health resources and more appropriately identify where additional resources are needed. In conjunction with a least restrictive policy, a continuum of care assures that clients are not placed in a setting more restrictive than absolutely necessary for treatment purposes and promotes continuity across services. In this context, acute psychiatric beds are viewed as only one albeit important component in the continuum, but one that is restrictive, highly developed, and resource intensive. Approaches developed in California and Nebraska for estimating psychiatric bed needs based on a continuum of care model are reviewed in this paper. In these approaches, acute psychiatric beds lose their primacy as the most highly needed resources. In fact, a major policy goal for health planners, in light of psychiatric DRGs and the existing surfeit of hospital beds, should be to assure that administrative and medical decisions do not promote inpatient treatment in lieu of more effective and more economical community-based alternatives.

These concepts and the development of a continuum of care are integral in numerous state mental health service systems serving children and adolescents (4) as well as adults. In addition, new data have been developed since 1980, and there has been growing emphasis on the use of Diagnosis Related Groups (DRGs), that can provide estimates of acute

psychiatric patient utilization in general hospitals. The Graduate Medical Education National Advisory Committee study of physician requirements has provided estimates of prevalence of different mental disorders; their estimates are now being incorporated into bed need methods that can focus on need rather than utilization. As well, discharge data for psychiatric DRGs now provide much better estimates of acute psychiatric services given by general hospitals, both with and without separate psychiatric units. These data offer new opportunities for restructuring the admittedly inadequate bed-need methodologies discussed in Bayer's monograph.

This paper will review the state-of-the-art for acute psychiatric bed need planning in the context of planning for an integrated system of care. Chapter 1 describes current inpatient characteristics in the setting and development of inpatient services. The chapter also focuses on utilization patterns and demographic characteristics of these resources. Chapter 2 explores trends in reimbursement that are expected to significantly impact on acute inpatient resources in the future, and the development of effective alternatives to hospitalization. Chapter 3 examines the state-of-the-art in psychiatric bed need methodologies, and reviews recent epidemiological studies and other reports that focus on individuals likely to require mental health resources. Psychiatric bed need methodologies are described which are based on target populations defined according to multiple criteria. Chapter 4 attempts to synthesize and summarize the major planning issues and to highlight a planning process or framework for assuring sufficient, but not excessive, acute psychiatric bed need capacity in states and local communities.

CHAPTER 1: INPATIENT PSYCHIATRIC TREATMENT CHARACTERISTICS AND ISSUES THAT AFFECT PLANNING

Psychiatric bed need planning is becoming increasingly more important in light of the health care mandate of cost containment and the mental health imperatives of deinstitutionalization and development of community-based systems of care. Cost containment, deinstitutionalization, and community-based treatment systems have significant ramifications for psychiatric inpatient units since these policies are implicitly based on decreasing the use of inpatient facilities as the major providers and foci of mental health treatment. However, as Kiesler (5) so aptly notes, the de jure national mental health policy is deinstitutionalization, but "our national de facto policy in mental health is hospitalization. The National Institute of Mental Health (NIMH) reports that over 70 percent of mental health expenditures are spent on hospitalization" (p. 1323). A recent National Association of State Mental Health Program Directors (NASMHPD) survey (6) found that all but 15 states still spend over 60 percent of their mental health dollars on inpatient psychiatric services. In order to set the context for planning, major characteristics of and issues raised by current psychiatric inpatient services will be reviewed.

• Shift in Location of Inpatient Treatment

It is generally assumed that reliance on inpatient treatment of mental disorders has decreased since the population in state mental hospitals has decreased from 560,000 in 1956 to approximately 138,000 in 1980, a decrease of more than 75%. However, the decline in state hospital utilization has

been offset by a concomitant growth of psychiatric beds in general hospitals and other specialty psychiatric hospitals in the private, often proprietary, sector. There has been a 30 percent increase in psychiatric units in general hospitals (7) and a significant increase in psychiatric facilities owned or managed by investor-owned chains. Between 1969 and 1982, the number of beds under for-profit auspices increased by 150 percent, now representing seven percent of the market of psychiatric beds in the country (8). General hospitals accounted for 17 percent of available psychiatric beds in 1982; state and county facilities accounted for 63 percent; Veterans Administration (V.A.) facilities accounted for 11 percent of the psychiatric beds available; and 9 percent were free standing facilities. As planners are well aware, a decrease in state hospital beds has tended to be associated with increases in Certificate of Need (CoN) requests for psychiatric beds in general hospitals and free-standing specialty facilities. Thus, it is more accurate to state that the setting of psychiatric beds has become more diversified in recent years.

There has been a shift away from public sector facilities toward private sector facilities. A recent study indicates that in addition to the 169,846 beds in state, county and Veterans Administration hospitals, 38,314 psychiatric beds are located in short-term general hospitals and an additional 25,601 beds in psychiatric specialty hospitals in the private non-profit and proprietary sectors (9). These figures do not include beds in residential treatment facilities or nursing homes that are filled by psychiatric patients.

This diversification of inpatient settings for treatment of mental disorders has increased the importance of clearly defining what is meant by an acute psychiatric bed. The traditional definition of psychiatric beds based on a length of stay of 30 days or less is clearly inadequate.

- Rates of Admission for Psychiatric Disorders

Another factor affecting fluctuations in psychiatric bed capacity is the rate of admissions. Although there has been a major overall net decrease in psychiatric beds due to state hospital bed reductions and closures, this has not led to a commensurate decrease in the rate of inpatient psychiatric admissions. In fact, admission rates appear to have remained stable since 1955 at approximately 800 episodes per 100,000 population. A survey conducted by the NIMH in 1977 estimated that 574,000 inpatient episodes for mental disorders occurred in general hospitals with psychiatric units and that there were a total of 1.7 million inpatient episodes for mental disorders across all specialty mental health facilities. However, a multiple source method of estimation developed by Kiesler and Sibulkin (10), which included all psychiatric admissions and discharges to general hospitals as well as other specialty facilities, uncovered approximately three million episodes. The difference between the NIMH and the Kiesler and Sibulkin results seems to be based on a National Center for Health Statistics (NCHS) 1979 survey that reported a total of 1,775,000 episodes for mental disorder in all general hospitals, with or without psychiatric units. Kiesler and Sibulkin contend that the NCHS data indicate that at least an additional 1.2 million people are receiving psychiatric care in general hospitals without specified or discrete

psychiatric units. Thus, 40 percent of the total episodes for mental disorders occur in general hospitals without psychiatric units. When these figures are taken into account, Kiesler and Sibulkin assert that the rate of mental health episodes has sharply increased in recent years (10). Kiesler and Sibulkin's research is consistent with a 1981 survey of psychiatric services in general hospitals co-sponsored by the American Hospital Association (AHA) and NIMH (11). Over 1800 general hospitals were surveyed and more than 1400 hospitals (77 percent) responded. Of those responding, 975 (69 percent) operated discrete psychiatric units. However, an additional 256 hospitals (18 percent) indicated that they provided psychiatric services that were integrated with other medical services.

It appears that a substantial portion of psychiatric treatment is provided in general hospitals without discrete psychiatric units. With respect to this de facto inpatient bed pool, questions about quality of care, appropriateness of admission, and treatment approaches need to be addressed by planners and administrators. Planners must also address the issue of whether admissions to medical-surgical beds for a psychiatric disorder are appropriate admissions, and whether they should be included in bed need methodologies.

- Differences in Admission Patterns Among Facilities

Bachrach (12) and others have asserted that private and public hospitals and general hospital units differ substantially in type of patient, diagnosis, length of stay, and source of payment. The influence of source of payment on the utilization of mental health services is

discussed at greater length in Chapter 2; this section will explore the research concerning other variables that influence admission patterns among various inpatient settings.

A study by Taube, Lee, and Forthofer, provides the most comprehensive analysis available of the personal characteristics and distribution of mental patients by type of hospital (13). Table 1 highlights data reported in their study that lead the authors to conclude:

> To summarize what is dramatically shown in this table, nearly one quarter of the patients served by state/county hospitals were blacks, while in general and private hospitals about one seventh were blacks. State/county hospitals served relatively more nonmarried, young, less educated persons and more veterans than did the other two types of hospitals. Relatively more patients in state/county hospitals had prior inpatient psychiatric care than the other two types of facilities, but the fraction with prior inpatient mental health care was greater than two thirds in all three settings. About 60 percent of patients in state/county hospitals were involuntary patients, compared with less than 16 percent for the other hospitals (p. 601).

NIMH researchers (1983) have also noted that the most common diagnosis for persons admitted to public sector hospitals is schizophrenia, while in the private sector it is affective disorders (14).

Sharfstein and Torrey (15) found that the distribution of discharge diagnoses for psychiatric care in general hospitals and some private freestanding facilities typically shows a high proportion of relatively mild diagnoses (e.g., neuroses, adjustment reactions), disorders that many clinicians agree do not generally require hospitalization. Clinicians

TABLE 1

PERSONAL CHARACTERISTICS AND REGIONAL DISTRIBUTION OF MENTAL PATIENTS BY TYPE OF HOSPITAL

Personal Characteristics	General Hospitals (%) (N = 4,611)	Private Hospitals (%) (N = 5,437)	State/County Hospitals (%) (N = 2,570)
Race			
Native American	0.74	0.31	1.48
Asian American	0.84	0.55	0.56
Black American	14.82	12.75	23.80
White American	79.15	82.34	69.80
Hispanic origin	4.66	4.06	4.79
Marital status			
Married	34.61	40.56	20.24
Not married	65.39	59.44	79.76
Age group (years)			
less than 20	11.15	16.04	9.32
20-24	13.22	11.62	18.33
25-29	14.20	11.91	16.77
30-34	14.22	11.72	13.15
35-39	10.21	8.95	9.55
40-49	13.20	13.96	14.35
50-64	15.06	15.59	14.17
65 or older	8.75	10.20	4.36
Education (years)			
less than 12	35.96	37.49	55.32
12	37.65	36.74	29.60
more than 12	26.39	25.77	15.08
Veteran status			
Veteran	10.92	13.39	18.97
Nonveteran	89.08	86.61	81.03
Prior mental health service			
No prior care	16.01	20.77	13.44
Non-inpatient care	12.76	12.51	5.55
Some inpatient care	71.22	66.72	81.01
Legal status			
Involuntary	15.73	11.78	59.83
Voluntary	84.27	88.22	40.17
Referral status			
Non-inpatient to non-inpatient	83.27	80.43	79.72
Non-inpatient to inpatient	14.76	13.73	9.62
Inpatient to non-inpatient	1.36	4.29	8.77
Inpatient to inpatient	0.61	1.66	1.89
Source of payment			
No fee payment	3.21	0.96	44.85
Personal resources	7.14	4.12	15.70
Medicare	14.89	15.99	10.18
Other health insurance	43.83	60.80	9.99
Medicaid	23.19	7.78	8.45
Social service funds	0.55	1.21	4.29
VA	0.65	0.24	0.72
CHAMPUS	1.12	3.68	0.65
Other	5.62	5.21	5.17

SOURCE: Carl A. Taube et al., "DRGs in Psychiatry: An Empirical Evaluation," Medical Care, Volume 22, No. 7., 1984, p. 600.

would also argue that some of these admissions are undoubtedly unnecessary (in terms of least restrictiveness, medical necessity, cost-effectiveness, etc.), some are misdiagnosed, and others are a disguise to avoid reporting more serious illness, such as schizophrenia, that may interfere with employment or other opportunities.

- Studies of Average Length of Stay

Differences in average length of stay (ALOS) are also found by psychiatric facility type. Although some of this variation may be due to differences in the demographic profile of patients, diagnoses, and preferred treatment approaches, insurance benefits also significantly influence length of stay. Taube, Lee, and Forthofer (16), in their study of ALOS for psychiatric patients, found that the 50th percentile of the length of stay by facility was 13.9 days for general hospitals with psychiatric units, 10.1 days for general hospitals without psychiatric units, 19.4 days for private freestanding hospitals, and 27.1 days for public county and state hospitals.

In the AHA and NIMH survey of general hospitals, Sheridan and Phillips (11) found that average length of stay was also influenced by the hospital size or its number of total beds. These data are presented in Table 2. The authors also found that ALOS was consistently higher for Veterans Administration (VA) hospitals. All VA hospitals sampled had over 100 beds, and the majority over 500. The ALOS in Veterans Administration hospitals with 100-199 beds was 23.20 days while VA hospitals with 500+ beds had an ALOS of 40.51 days. Both of these lengths of stay are double those

TABLE 2

AVERAGE LENGTH OF STAY AND OCCUPANCY RATE
FOR PSYCHIATRIC PATIENTS IN GENERAL HOSPITALS BY HOSPITAL SIZE

Number of Total Beds	ALOS	Occupancy Rate
50-99	12.67	71%
100-199	12.84	82.13%
200-299	15.29	87.86%
300-399	16.31	82.50%
400-499	14.39	83.77%
500+	19.64	85.25%

SOURCE: Sheridan and Phillips, Psychiatric and Alcoholism Services in General Hospitals, 1982.

reported by general hospitals. The occupancy rates in Veterans Administration hospitals were also consistently higher, with an average occupancy rate of 90 percent. Taube et al. (17) also found that teaching hospitals, with or without psychiatric units, had a longer average length of stay (16.5 days) than non-teaching hospitals (13.9 days), a difference of 19 percent.

Finally, Boelhouwer and Rosenberg (18), in a study of length of stay based on data from the psychiatric unit at Hartford Hospital in Connecticut, found that length of stay was significantly associated with a number of psychiatric practice and patient characteristic variables. For example, psychiatric admissions of less than 15 days included more men; married, divorced or separated people rather than single and widowed people; more employed people; fewer patients being treated with electroconvulsive treatment (ECT) or drug therapy; fewer patients with a concomitant medical diagnosis; and fewer persons with a diagnosis of psychosis. The major treatment variables associated with longer lengths of stay were the use of ECT and major tranquilizers. As for demographic variables, being unmarried and female were also associated with increased lengths of stay.

- Differences Between Discrete Psychiatric and Integrated General Hospital Units

To further complicate matters, the ALOS of psychiatric admissions in general hospitals with and without discrete units differs significantly. Those with discrete units tend to have an ALOS of 13.9 days while those without units have an ALOS of 10.1 days. Since many mental health

professionals and planners have raised questions about the quality, intensity, and appropriateness of psychiatric treatment received on general medical-surgical units, recent studies have been undertaken. It is recognized that psychiatric patients are admitted to general medical-surgical units in times of psychological crisis, for medical complications, or while awaiting transfer to a more appropriate psychiatric treatment program. However, additional factors also appear significant. Taube et al. (17) found that differences between psychiatric admissions to general hospitals with psychiatric units in contrast to hospitals without discrete units may depend on several factors. They note that:

- differences may reflect a greater number of physical disorders among patients treated in hospitals without (psychiatric treatment) units;

- hospitals without psychiatric units tend to serve a higher proportion of persons age 55 and over, while discrete psychiatric units tend to serve higher proportions of those age 25 to 44 (p.756);

- differences may indicate that the more severely ill psychiatric patients are being admitted to special psychiatric units and patients with milder psychiatric difficulties, significant nonpsychiatric conditions, or both may be more likely to be admitted to general medical or surgical units. For instance, non-discrete units are more likely to have a larger proportion of psychiatric patients with diagnoses related to substance-use

(alcohol or drug abuse), while specialized psychiatric units are more likely to treat those with psychosis as a diagnosis (p. 756);

- differences also exist because certain general hospitals are much less likely to have a psychiatric unit. An example is the rural hospital, which may not have the patient volume or the financial and specialized staff resources necessary for such a unit. Sheridan and Phillips (11) also found that hospitals with less than 200 beds were less likely to have discrete psychiatric units;

- differences may reflect variations in treatment goals. Inpatient units typically provide comprehensive psychiatric workup and treatment, while patients admitted to general units may be there for observation, a holding period pending transfer elsewhere, special procedures, or short-term stabilization (p. 759);

- differences may exist because admissions to psychiatric units are usually made by psychiatrists, while admissions to general units may be made by any physician on the medical staff.

Taube et al. also found some significant differences in costs. The mean charge per day of admission was found to be consistently lower in hospitals with discrete units. Despite general hospitals with psychiatric units having greater lengths of stay than other hospitals, the researchers found (Table 3) that the mean charge per episode of treatment was lowest in

TABLE 3

MEAN CHARGES PER EPISODE AND PER DAY
FOR PSYCHIATRIC DISCHARGES FROM GENERAL HOSPITALS
WITH AND WITHOUT PSYCHIATRIC UNITS, 1982

Hospital Ownership	Mean Charge Per Episode		Mean Charge Per Day	
	Unit	Nonunit	Unit	Nonunit
Nonfederal government	$2,552	$2,699	$295	$393
Private not-for-profit	3,663	3,022	311	341
Private for-profit	4,144	6,742	283	467

SOURCE: Carl A. Taube et al., "Prospective Payment and Psychiatric Discharges from General Hospitals With and Without Psychiatric Units," Hospital and Community Psychiatry, Vol. 36, No. 7, July 1985, p. 758.

nonfederal government hospitals and almost equivalent regardless of whether they had a specialized unit; costs were higher in discrete units located in private not-for-profit facilities, and highest in private for-profit general hospitals without psychiatric units.

Summary

From this review of the characteristics of inpatient units and populations, a number of factors should be considered in determining the number of acute psychiatric beds needed in a planning area. These features include:

(1) Target population: Careful definition and consideration of the population intended to be served by acute psychiatric beds is extremely important. Planners must have a clear understanding of populations currently being served by existing facilities and those who are currently underserved or require greater access, since different types of psychiatric units serve different populations of patients. There has also been a significant growth in young chronic patients, ages 18 to 34. Research indicates that these patients often do not or cannot optimally use existing inpatient services. Other types of inpatient services or alternatives may be needed (19).

(2) Mix of facilities: Communities benefit from having a mix or range of facilities available. The closure of state hospital beds, for example, does not mean that these populations will be

automatically served by community general hospitals or freestanding psychiatric facilities. Therefore, planners must be responsible for ensuring that some type of acute psychiatric beds remain available and accessible to such patients. Some states, such as Massachusetts and Michigan, have tied approval of additional beds in general hospitals or freestanding facilities to closure of state hospital units and agreements to provide acute psychiatric services to patients traditionally served on such units.

(3) Available Supply: Planners appear to undercount the total available supply of beds in a given area. For example, Veterans Administration hospitals serve a sizable portion of psychiatric patients, but these facilities are seldom included in health planners' bed supply calculations.* In addition, planners should be aware that a proportion of state hospital beds may also be used for acute psychiatric treatment, contrary to the assumption that state hospital beds only involve long-term care. Beds counted as part of the available supply also vary according to the target population. For example, if Medicaid eligible clients are the target population, few private or for-profit proprietary beds can be considered to be accessible to this population.

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*This is principally because federal hospitals are exempt from Certificate of Need and other health planning activities. However, planners should determine the percentage of the area population using such resources and adjust their calculations accordingly.

(4) Average length of stay (ALOS): Although planners continue to use "30 days or less" as the principal definition of acute psychiatric care, planners can refine ALOS estimates to a finer degree. Planners should set ALOS standards based on type of facility, population served, size of hospital, and intended inpatient treatment goals. Lower ALOS standards suggest that fewer beds will be needed to serve a population. The average length of stay in many facilities, and general hospitals in particular, is almost half of the 30 days often allotted.

(5) Use of general hospital medical-surgical beds: Planners must recognize the de facto use of medical-surgical beds for psychiatric treatment in general hospitals, given that almost 40 percent of psychiatric discharges from general hospitals are from medical-surgical units. If planners do not consider such utilization in calculating available bed supply, the probability of encouraging excess psychiatric bed capacity is significantly increased. Further, the issue involves the appropriateness of mental health treatment in medical-surgical units. This policy issue is currently unresolved, and decisions will be affected by rural/urban settings, typical size of hospitals in the state, the availability of mental health personnel, availability of community-based resources, etc. Nevertheless, it is imperative that planners no longer ignore the large proportion of psychiatric services being delivered in general hospital medical-surgical beds and begin to develop methods for

incorporating this capacity into acute psychiatric bed need deliberations.

Finally, available community resources and reimbursement of psychiatric services significantly influence the supply of and need for acute psychiatric beds. Since these factors are so critical and constitute the major arena of change in mental health systems, they are discussed in greater detail in the next chapter.

CHAPTER 2: TRENDS IN REIMBURSEMENT AND THE DEVELOPMENT OF COMMUNITY-BASED ALTERNATIVES

As in other health care sectors, the configuration and utilization of mental health services are significantly influenced by financing and reimbursement incentives and disincentives. As noted by Elpers and Crowell (20), "it is impossible to estimate the need for psychiatric beds without first having a clear understanding of who will be paying the bills.... Most third-party payers tend to focus on two kinds of psychiatric care, acute inpatient hospital services and out-patient services -- the same ones they are accustomed to covering for general medical-surgical patients" (p. 756). Furthermore, they are more apt to limit coverage of outpatient services while providing more extensive coverage in terms of amount and costs of service for inpatient care.

Extensive research has been very consistent concerning three major facts about mental health treatment and associated costs:

(1) Persons receiving treatment for mental disorders tend to utilize other types of health services less frequently. Consequently, provision of mental health services reduces and offsets overall health care costs for patients and their families (21).*

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*Much of the recent research has not yet appeared in the published literature; one noteworthy example is the recent study of Aetna insurance claims being conducted by Jerome Hallan, Ph.D. and Harold Holder, Ph.D.

(2) Untreated mental disorders result in other costs, such as reduced productivity and lost employment (22).

(3) Inpatient psychiatric treatment is the most costly component of mental health systems, even though inpatient services have not proven to be more efficacious than other and less costly mental health interventions. In 1982, Kiesler (5) reviewed ten studies involving seriously disturbed patients in which there had been random assignment of patients to a mental hospital unit or a community alternative, such as psychiatric day treatment. He found that across the ten studies, the effects of alternative care settings were consistently more positive than those of hospitalization. In addition, Kiesler found clear evidence of the self-perpetuation of mental hospitalization. He concluded that research on alternative care found it to be always as good or better than hospitalization regarding outcomes, and almost always less expensive.

Several financing and reimbursement mechanisms are being implemented in states and at the federal level with major impact on mental health treatment costs, and particularly on the utilization of inpatient services. These changes include:

(1) limitations on state Medicaid coverage for inpatient psychiatric admissions;

(2) funding mechanisms and incentives to develop alternatives to inpatient treatment (e.g., outpatient, day treatment programs, and Community Support Programs for persons experiencing chronic and severe mental disorders);

(3) growth of prepaid and managed health care systems; and

(4) prospective payment system for psychiatric services (i.e., psychiatric DRGs).

All of these changes are having, and can be expected to have, a substantial impact on the configuration and utilization of mental health services in this country during the next decade. Many clinicians, policymakers, and administrators express uncertainty about whether these changes will have a detrimental or beneficial impact on mental health services. These changes are also of critical concern to state mental health agencies that, having undergone deinstitutionalization, are reluctant to expand their operation of large state hospitals or to assume an even larger proportion of mental health treatment costs.

- Limitations on Medicaid Coverage

Medicaid, the major source of payment for inpatient medical treatment for poor persons, has undergone dramatic changes since 1980. Toff (23) has noted that, with few exceptions, Medicaid coverage has experienced retrenchment during the last five years. Sharfstein, Frank, and Kessler (24) note that Medicaid changes take have two general forms: limitation of

the length of reimbursable stay per admission, and specification of a maximum daily allowable charge. They indicate that responses to cutbacks and limitations in Medicaid coverage for psychiatric services include:

- liability of patients or their families for all costs incurred after limits have been reached;
- hospitals' attempts to use accounting methods to shift responsibility for final payments for seriously ill patients from Medicaid to cost-based payers such as Blue Cross;
- hospitals' development of criteria that preclude the admission of patients who have a high probability of exceeding the limit on length of stay; and
- increases in the demand for state mental hospital services.

Many hospitals have utilized several of these methods to limit psychiatric stays reimbursed by Medicaid (25). Since general hospitals are especially dependent on Medicaid funding, it is not surprising that ten states which have imposed limits on length of inpatient stay have experienced occupancy rates of 68 percent in 1978, compared with the national rate of 89 percent (26).

Despite their cost containment aspects, limitations on Medicaid coverage do not constitute creative or long-term mechanisms to improve cost-effectiveness or advance programmatic goals. The major results of

these limits is rather to shift costs from a federal and state sharing program, as Medicaid has been implemented, to full state fiscal responsibility.

- Increasing Enrollment in Prepaid Health Plans

There has been a major increase in the number of Americans enrolled in prepaid health plans (PHPs), which includes health maintenance organizations (HMOs) and other capitated plans. In 1982, there were 10.8 million people enrolled in 277 HMOs throughout the country, a six percent enrollment increase from 1981 (32). In prepaid plans, there are great incentives to provide care at the most appropriate and least costly level. Although mental health benefits are often included in PHPs, they appear to be minimal. A national study of PHPs was undertaken by Levin and Glasser (32) to determine what types of mental health benefits were offered by these entities. They found that "the basic benefit structure approached a median of 30 days of mental health hospital coverage (per member per year) and 20 ambulatory mental health visits (or 40 group visits per member per year), with greater mental health coverage benefits offered by PHPs that had health plan enrollments in excess of 10,000 members and that had been operational for more than five years" (p. 352).

The surveyors also found that more than one-third of the PHPs set lifetime maximum financial limits on mental health coverage. The mean admissions were 3 per 1,000 members, and the mean hospital days were 32.13 per 1,000 members. The average length of stay per admission was 10.20 days. The authors found that hospital utilization rates for mental health

services within PHPs were lower than the hospital utilization rates of more conventional insurance plans. Utilization rates for ambulatory mental health services within PHPs were higher than the ambulatory mental health service rates of traditional health plans.

The authors concluded that the integration of mental health services within PHPs has many advantages, including:

- the coordination of mental health services with primary medical care;
- greater accessibility to services;
- provision of peer review systems;
- increased continuity of care;
- greater control over the referral process;
- increased monitoring of costs;
- greater responsiveness to changes in member needs; and
- increased encouragement of preventive intervention. (32)

The growth in the percentage of population enrolled in prepaid health plans suggests that the current incentives to provide acute psychiatric inpatient care rather than ambulatory services will decrease even more, as such plans will emphasize and encourage less costly and more preventive services that encourage earlier intervention. For example, California, which has the largest percent of its population in some type of PHP, also has one of the lowest percentages of patient days in hospitals in the country; PHPs have certainly been a major contributor to reducing California's hospital utilization.

Nevertheless, it should be noted that most PHPs do not usually offer a comprehensive mental health package, and the selective nature of their populations (employed persons) suggest that they are, from the outset, involved with a more healthy population.

Given the growth in health care expenditures by business, and an increasing proportion of funding for employees' mental health and alcohol abuse treatment, businesses are motivated to provide comprehensive packages of services in a cost-effective manner. One noteworthy approach is the development of specialized prepaid mental health plans, which in effect are mental health PHPs.* Although these are fledgling developments, a few currently exist around the country.

The oldest of the existing mental health HMOs is the California Psychological Health Plan (CPHP), which acts as a middleman between an HMO and individual providers. CPHP is located in Los Angeles and opened in 1975 following a report by Northern California Kaiser-Permanente, which found that 68 percent of its doctor visits were for complaints for which no organic basis could be found (33).

CPHP now has over 300 providers in various communities that provide mental health services under contract. Its clients include Hughes Aircraft and the cities of Long Beach and Anaheim. Most of CPHP's business is

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*The author wishes to acknowledge information and materials obtained through communication with Joseph Eichenholz, Assistant Vice President of CIGNA Corporation, for most of the discussion of mental health PHPs.

fee-for-service, with a small component of capitated services for several self-insured companies. The first five visits are free to the client. After these visits, the employee pays 15 percent of the next five, 30 percent of the cost of the next five, and 50 percent of any subsequent visits. Currently, CPHP has subscribers totalling 90,000 family units. However, these subscribers visit a small group of providers in a small geographical area where there are no more than 15,000 to 20,000 subscribers.

CPHP focuses on the delivery of outpatient services and offers a full range that includes individual and group psychotherapy for adults, adolescents and children; marriage and family counseling; behavior modification programs; hypnosis; biofeedback; and other procedures for the management of stress and pain (34). Under the plan, prescription drugs and in-hospital mental health benefits remain the responsibility of the basic health plan. The CPHP plan has four significant features (33):

(1) Cost -- The first five visits are provided without charge. The initial cost barrier is thereby removed and utilization is encouraged since there is no deductible and no copayment.

(2) Confidentiality -- There are no claim forms as such, and no employee, or family member, can be identified by the employer or co-worker as someone who is seeking therapeutic services.

(3) Access -- Mental health services are provided in private offices of psychologists and psychiatrists on a prepaid basis. There are over 300 providers covering a wide geographic area.

(4) Quality -- Professional Standards and Management Committees (PSMC) have been established throughout California. After five sessions, the provider meets with three professional colleagues and presents a diagnosis, prognosis, and plan of treatment. The plan is reviewed again by the whole PSMC if treatment exceeds ten sessions.

Although a more formalized research study on CPHP's effectiveness is currently underway, preliminary data have important implications for inpatient bed needs. Forty percent of CPHP subscribers stop after the initial five free sessions. Less than three percent of the subscribers to the plan are referred for inpatient admissions. There has been a reduction in medical utilization reported by Long Beach employees and there has been no premium increase with the addition of CPHP's benefits to Long Beach employees.

There are also prepaid mental health systems that serve chronically mentally ill patients. The Biodyne Centers of America in Hawaii and San Francisco have contracts to serve Hawaii's Medicaid population and a contract with Blue Cross to provide mental health services for 55,000 federal employees (35). Clinicians employed in Biodyne's programs undergo extensive training that teaches them to emphasize prevention and problem-solving and to make house calls if appropriate. The clinics train

therapists in the efficiency of the delivery approach and costs are controlled by the delivery model rather than by external limits on services. Forty percent of Biodyne's patient population have a diagnosis of chronic schizophrenia.

A mental health capitation plan demonstration is expected to be implemented in Rochester, New York. Essentially, the plan will pay community mental health centers to provide all needed services to a population of chronically mentally ill patients. The amount of payment would be based on some measures of severity and chronicity. In the initial phase, CMHCs will become responsible for chronic patients who are currently in state mental hospitals.

Prepaid health plans specifically designed for mental health populations are receiving increasing attention from the business community and from some state, county, and city governments. It can be expected that experimentation with such models will increase. Managed health care plans are viewed as an increasingly effective method to provide appropriate services to high-risk populations, such as mentally ill persons.

- Psychiatric DRGs*

Of all the proposed financing changes discussed thus far, psychiatric DRGs (diagnosis-related groups) have engendered the most intense arguments and debates. The threat of psychiatric DRGs has focused clinicians' attention on better defining their services, populations, and goals. In addition, it has generated a substantial amount of research; in fact, most of the research presented in Chapter 1 was conducted because of the debate surrounding psychiatric DRGs. The controversy revolves around whether and how psychiatric services should be treated under the Medicare Prospective Payment System (PPS) for hospitals which began in October, 1983. Under this system, hospitals are paid a pre-established amount for each hospital stay based on the diagnosis-related group to which a stay is assigned at discharge. At the present time, specialized hospitals, such as rehabilitation, children's hospitals, and freestanding psychiatric facilities, as well as specialized units, such as burn units, cancer centers, and substance abuse and psychiatric units are exempted from this payment system. The exemptions were based on uncertainty about how well a DRG-based payment system would work for specialized services and units. Although no time limitation was applied to the types of facilities with exemptions, Congress did mandate that the Secretary of Health and Human Services report by December 31, 1985 on whether and, if so, how these exempted facilities could be brought under PPS (36).

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*Much of this discussion is based on the draft of a paper prepared by Thomas McGuire, Ph.D. and others at the Health Policy Center, Florence Heller School, Brandeis University and at Boston University.

TABLE 4

DIAGNOSIS-RELATED GROUPS (DRGs), RELATIVE WEIGHTING FACTORS, GEOMETRIC MEAN LENGTH OF STAY (LOS), AND LENGTH-OF-STAY OUTLIER CUTOFF POINTS USED IN THE PROSPECTIVE PAYMENT SYSTEM

DRG	Title	Relative weights	Geometric mean LOS (days)	Outlier cutoffs (days)
424	Operating room procedures with principal diagnosis of mental illness	2.1938	14.2	35
425	Acute adjustment reaction and disturbances of psychosocial dysfunction	.6812	5.8	27
426	Depressive neuroses	.9495	9.4	30
427	Neuroses except depressive	.7678	6.9	28
428	Disorders of personality and impulse control	.9741	8.3	29
429	Organic disturbances and mental retardation	.9523	8.8	30
430	Psychoses	1.0934	10.8	32
431	Childhood mental disorders	2.2519	15.4	36
432	Other diagnoses of mental disorders	1.0525	7.2	28
433	Substance use and substance-induced organic mental disorders, left against medical advice	.4457	2.5	20
434	Drug dependence	1.0404	9.1	30
435	Drug use except dependence	1.0738	8.0	29
436	Alcohol dependence	.8853	8.1	29
437	Alcohol use except dependence	.6183	3.5	25
438	Alcohol- and substance-induced organic mental syndrome	.8420	6.9	28

SOURCE: HCFA Medicare Prospective Payment System, 1981.

Under the current DRG system being used by the Health Care Financing Administration (HCFA), 15 psychiatric and substance abuse diagnoses were developed with norms of stay based on original estimates by the Yale researchers. These norms, shown in Table 4, have been at the center and core of the psychiatric DRG controversy.

McGuire et al. (36) identify primary and secondary criteria for an effective prospective payment for psychiatric care, as shown in Table 5. Critics contend that the proposed system for psychiatric DRGs does not meet these basic criteria and that it has basic flaws that will create major difficulties. Major criticisms reviewed by McGuire et al. (36) and others are as follows:

(1) Both for general hospitals and mental health treatment, research indicates that prospective payment reduces the amount of treatment provided.

(2) Psychiatric facilities serve patients whose treatment requirements are not well described by diagnosis and procedure codes. Thus, DRGs would bring the mental health profession's tolerance of diversity in treatment parameters under enormous pressure (37).

(3) Unlike DRGs for medical illness that tend to have many modifiers, psychiatric DRGs are based primarily on diagnosis.

TABLE 5

CRITERIA FOR EVALUATING PROSPECTIVE PAYMENT FOR PSYCHIATRIC CARE

Primary Criteria

1. Promote a cost-effective system.
2. Minimize systematic financial losers or gainers.
3. Be compatible with Medicare general payment systems and state mental health systems.

Secondary Criteria

4. Minimize financial risk to facilities due to random variation in their case load.
5. Minimize cost of administration.
6. Be based on a clinically meaningful classification system.

SOURCE: Thomas McGuire et al., "Options for Including Psychiatric Hospitals and Exempt Psychiatric Units Under the Medicare Prospective Payment System" (draft), March 15, 1985, p. 19.

(4) Psychiatric DRGs are predicated solely on length of stay norms. As noted earlier, length of stay varies considerably according to the type of psychiatric facility, treatment philosophy, and sociodemographic profiles of patients. In research conducted by Taube et al. (13, 16) psychiatric DRGs alone explain only 3.2 percent of the total variance in length of stay. Type of facility (i.e., setting) accounted for a significantly greater amount of the variance in length of stay, even after controlling for DRG.

(5) DRGs do not adequately account for "severity" differences among similar psychiatric disorders experienced by various patients (38).

(6) Financial incentives at admission will be affected by the classification system. To the extent that the resource needs of a patient can be foreseen prior to admission, a patient may be classified as a likely financial risk. The incentives would be for private and for-profit hospitals to refer the difficult and uneconomical cases to specialty and public hospitals (17).

(7) There is some evidence that DRG "creep" will take place such that patients will receive diagnoses based on the amount of reimbursement. For example, in New Jersey, after the introduction of a DRG-based PPS in 1980, admissions for psychosis (the most generously reimbursed category) rose from 58 percent to 80 percent of total admissions (39). Others report that psychiatric

DRGs in New Jersey have led to deterioration in treatment of psychiatric patients and that patients are being discharged at a lower level of functioning.

(8) Psychiatric facilities are a part of a highly differentiated system of care in which various hospitals have different roles and in which patients high treatment needs are systematically referred to a few specialized facilities. DRGs may result in more specialized facilities being pressured to treat more costly and difficult cases while receiving less funds. A classification system based on the average cost across all types of facilities may consequently be detrimental to classes of institutions, such as specialized psychiatric hospitals (16, 37).*

In addition to these criticisms, state mental health program directors foresee that DRG implementation as currently constructed would erode many of the inroads that have been made in closing or reducing state hospital capacity and transferring funds to community-based services. They assert that DRGs have the potential of returning public mental health systems to an institutional orientation with grossly inadequate resources as existed prior to 1955.**

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*In fact, there have been suggestions that specialized psychiatric hospitals be treated in a manner similar to the special considerations currently given to teaching hospitals under the Medicare PPS system.

**Based on conversations with staff and members of the National Association of State Mental Health Program Directors (NASMHPD) in July, 1985.

Nonetheless, some mental health professionals have noted benefits of bringing psychiatric care under some type of prospective reimbursement system. According to Jencks, Goldman and McGuire (37), these advantages include:

- program integrity: the prospective payment system depends on covering all hospital services, or at least moving toward total coverage;

- economy: by putting non-exempt facilities under the prospective payment system, HCFA stands to realize economies from increased efficiency;

- comparability and equal coverage: the prospective payment system offers psychiatry a prospect of comparable coverage of psychiatric services and general medical services and consequent comparability of benefit;

- flexibility: the prospective payment system may make coverage of psychiatric services more flexible; with set payment for an episode of inpatient treatment, hospitals may vary the mix of service without concern for specific coverage rules.

Despite these benefits, many of the criticisms are considered valid, and a series of research studies have been undertaken to examine some of the more pertinent issues. Most policymakers recognize that some adjustments must be made to the currently proposed classification system

for psychiatric DRGs. McGuire et al. (36) reviewed a variety of options for improving the current system that are briefly outlined in Table 6. Whether these options will be incorporated and whether the exemption will be lifted is yet undecided.

- Development of Alternatives to Inpatient Treatment

Some states are developing incentives to encourage less costly but equally or more effective mental health services as a method to reduce reliance on inpatient psychiatric treatment. For instance, the State of New York has recently developed a programmatic model for intensive partial hospitalization programs as one mechanism to reduce admissions to, and lengths of stay in, inpatient psychiatric units (27). The model will provide incentives to general hospitals, primarily through increased reimbursements, for partial hospitalization services. When the model is implemented, the state expects to eventually save a portion of Medicaid mental health expenditures through reduction in psychiatric inpatient utilization. A similar program implemented several years ago at the Massachusetts Mental Health Center (MMHC) in Boston has proven the effectiveness of such models (28). Described as a "psychiatric inn" and day hospital, its implementation resulted in a proportional increase in day hospitalization and a decrease in inpatient treatment, while the total number of patients treated remained stable. After implementation of the day hospital and psychiatric inn, the mean length of stay dropped to 9.9 days on the inpatient unit from a previous average stay of over 25 days. MMHC administrators also found that greater use of day hospital had a substantial affect on costs. Reorganization of services led to an

TABLE 6

OPTIONS FOR IMPROVING THE CURRENT PROSPECTIVE PAYMENT SYSTEM FOR PSYCHIATRIC DRGs

1. Base payment on type of facility in which treatment occurs -- a payment differential option.

2. Modify the patient and clinical condition variables included in DRG groups:

   (a) Patient Modifiers:

   - age
   - marital status
   - prior history of treatment, especially hospitalization

   (b) Clinical Modifiers:

   - "severity of illness" index
   - "staging"
   - reclassification of diagnoses (such as the 22 alternative diagnostic categories (ADRGs) suggested by Taube et al. (14).

   (The problem with clinical modifiers is that they make diagnosis more manipulable since they are very difficult to measure. The less objective the criteria, the more difficult it will be to monitor improper classifications.)

3. Procedure modifiers that may reduce systematic risk:

   (a) intensive care such as occurs in specialized units
   (b) substance abuse detoxification services
   (c) substance abuse rehabilitation services

   (The potential disadvantage of this approach is that it provides very strong incentives to engage in the activity tied to payment.)

4. Payment System Options

   (a) Payment on the basis of national average with no additional experience rating for psychiatric facilities beyond what is done for other hospitals.

   (b) Experience rating on the basis of type of facility within the facilities that provide psychiatric inpatient care. An example of this would be paying a general hospital with a psychiatric unit differently for treatment of the same patient than a general hospital without a unit.

   (c) Experience rating based on the hospitals own past history. (The American Hospital Association's proposl for payment would fall here).

   (There are many advantages and disadvantages to each of these options, which are discussed more fully in the referenced paper.)

SOURCE: Thomas McGuire et al., "Options for Including Psychiatric Hospitals and Exempt Psychiatric Units Under the Medicare Prospective Payment System" (draft), March 15, 1985, p. 19.

estimated $225,400 savings in 1982, primarily as a result of reductions in the cost of direct-care staff.

Wisconsin has made a commitment to reallocating mental health funds to community-based services, believing that the greatest opportunity for addressing unmet service needs is through inpatient cost reduction and consequent shifting of savings to priority service gaps (29). Strategic reduction of inpatient utilization, capacity, and costs consequently provides legislators with increased options for matching scarce services with current and emerging mental health service needs. Because of several such strategies, the Director of the Wisconsin Office of Mental Health, Dr. David Goodrick, asserted that in 1982 Wisconsin spent less on state mental hospitals than any other state, had a very low public inpatient capacity (i.e., 1135 beds for a population of 4,750,000), and had a 50/50 funding ratio of inpatient and community services (with the most well developed local systems spending less than 25% of funds on inpatient treatment). According to Goodrick, five major strategies have been responsible for these changes:

(1) <u>the flow of public inpatient funds through county level mental health agencies</u>: In 1974, the Wisconsin legislature passed a mental health statute that authorized and required counties to provide a full range of inpatient and community mental health services. Stein and Ganser (30) report that the major effect of the legislation has been to place responsibility for developing and coordinating mental health services

on one county agency and to provide funding in such a manner that the "dollar follows the patient".

(2) the conversion of excess public inpatient beds: In 1973, the state legislature mandated the Department of Health and Social Services to convert the majority of beds in the county-operated mental hospital system to either public medical institutional beds or residential care beds. In 1973, there were 10,445 county hospital beds and 1,456 state operated inpatient beds in the mental health system. By 1976, only 1,080 county-operated and 860 state-operated inpatient beds remained in the mental health system. By 1984, there were 541 county-operated beds and 594 state-operated inpatient beds.

(3) the development of cost-effective inpatient substitutes: Since the late 1970's, legislatively appropriated capacity-building funds, combined with county funds, have established 59 Community Support Programs (CSPs) throughout the state that serve more than 5,000 chronically and severely mentally disabled persons in their communities each year. Wisconsin recently became the first state to pass a law requiring CSPs in every local mental health system.

(4) the tightening of involuntary civil commitment criteria: The involuntary civil commitment law for mentally ill persons refusing treatment was changed in 1974 to include relatively stringent dangerousness criteria, which has had the effects of reducing involuntary inpatient admissions and of permitting less restrictive,

clinically appropriate treatment since commitments are made to the local mental health board.

(5) the provision of a gatekeeping mechanisms for inpatient admissions: The state legislature in 1981 established a Medical Assistance Mental Health and Alcohol and other Drug Abuse Gatekeeper Program. While all Medical Assistance expenditures rose at seven percent annually between 1981-1983, Medical Assistance expenditures for mental health and substance abuse services rose at five percent.

Strategies, such as those utilized in Wisconsin, are examples of ways to restructure mental health systems and to provide incentives for development of alternative services while not compromising patient access or quality of care.

The State of Oregon chose to utilize the third-party insurance benefit package to create incentives for the utilization and development of less costly alternatives in the mental health system. In 1983, the Oregon legislature enacted Chapter 601, a bill which created reimbursement for a full continuum of care for both chemical dependency and mental illness. In addition to allowing people to receive treatment in the most appropriate setting, this reimbursement system saves money over the old model in which only the most expensive settings had been reimbursed. Chapter 601 made a number of changes in mandated benefit levels for mental health and chemical dependency services (see Table 7). The inpatient mental health benefit was lowered substantially, from approximately $24,000 over a 24-month period to

TABLE 7

MANDATED HEALTH INSURANCE BENEFITS IN OREGON FOR CHEMICAL DEPENDENCY, INCLUDING ALCOHOLISM, AND FOR MENTAL OR NERVOUS CONDITIONS, BEFORE AND AFTER CHAPTER 601, OREGON LAWS 1983

	BEFORE		AFTER	
Features	Chemical Dependency Including Alcoholism	Mental or Nervous Conditions	Chemical Dependency Including Alcoholism	Mental or Nervous Conditions
Scope	Alcoholism only	Diagnosed mental or nervous condition	Other drug dependency as well as alcoholism	Diagnosed mental or nervou conditions
Statutory authority for reduced co-payments as a cost-containing incentive for use of outpatient, day, or residential treatment, rather than inpatient?	No	No	Optional in negotiated insurance contracts	Optional in negotiated insurance contracts
Statutory authority for more costly treatment to be subject to review against detailed criteria justifying need, as a cost-containing incentive?	No	No	Optional in negotiated insurance contracts	Optional in negotiated insurance contracts
Requirement for coverage in group policies?	Shall provide	Shall offer	Shall provide	Shall provide
Requirement for coverage in individual policies?	Shall offer	None	Shall offer (alcohol only; and $4,500, as at present)	None
Minimum overall benefit every 24 months?	$4,500	$25,000 (approximate)	$6,000	$9,000 (unless payments are asked for both chemica dependency and mental or nervous conditions, in which case an overall cap of $6,000 may be applied)
Minimum outpatient benefit every 24 months?	None	$1,000 (actually $500 every 12 months, with 50% copayment)	$1,500, with the same copayment as for any medical outpatient treatment; usually 20%	$2,000 (sunset after 2 years), with the same co-payment as for any medical outpatient treatment; usually 20%
Minimum benefit for intensive part-day treatment or for round-the-clock non-medical residential treatment, every 24 months?	None	None	$3,000, with the same copayment as for inpatient treatment	Up to $3,000, from the $7,500 for inpatient (see below), with the same co-payment as for inpatient treatment
Minimum benefit for round-the-clock inpatient treatment in which needs for nursing care and physician treatment may be met, every 24 months?	$4,500	$24,000 (approximate; actually, 30 days of hospitalization every 12 months; present rates around $400 per day)	$4,500, with the same co-payment as for any medical inpatient treatment	$7,500, with the same co-payment as for any medical inpatient treatment

ICE: Oregon SHPDA, Oregon's Experience with Remodeling Insurance Benefits for Mental Health and Chemical Dependency: Report to the 63rd Oregon Legislative Assembly on Implementation of Chapter 601, Oregon Laws 1983, March 15, 1985.

only $7,500 a year. Minimum coverage levels for outpatient and residential services were established for the first time. Coverage of treatment for drug addiction was also mandated for the first time.

As part of the legislation, the Oregon SHPDA was required to submit a report to the legislature about the impact of the statute and any additional issues that need to be resolved in the implementation of the law. The SHPDA report (31) indicated that Chapter 601 was expected to have three principal results:

(1) the development of a continuum of care and additional access of patients to less restrictive settings; as a corollary more residential, day treatment and outpatient programs would be created, and some inpatient programs might close.

(2) the shifting of patients (where appropriate) from inpatient to outpatient or residential levels; it was expected that Chapter 601 would cause a shift in the service system, so that less services were provided at the inpatient level and more services were provided in less expensive residential and outpatient settings.

(3) an overall reduction in the costs of mental health and chemical dependency treatment would be achieved, enabling more people to obtain services.

The SHPDA reported the following results to the legislature:

- The impact on chemical dependency services has been greater than that on mental health. However, at least three new outpatient programs for mental health have been approved. Also, several hospitals have begun outpatient or day hospitalization programs for persons experiencing mental illness.

- Blue Cross/Blue Shield and Select Care (a prepaid plan) found that total costs of claims decreased while volume of claims increased. Inpatient reimbursement dropped substantially from 89 cents per member per month in Blue Cross before enactment to only 31 cents after the statute took effect. For Select Care, this figure dropped from 53 cents to 18 cents. Overall, insurance companies, and particularly those doing utilization reviews, appear to have experienced fiscal savings as a result of chapter 601.

Although the system still has operational problems to be resolved, SHPDA staff reported that:

> From available data, Chapter 601 has achieved its intended effects. The service delivery system is undergoing a restructuring that involves less emphasis on inpatient care and greater emphasis on outpatient and residential services. The benefit levels created by the statute have resulted in large cost savings to insurers. More people are receiving insurance reimbursement for mental health and chemical dependency services, and their overall access to such services is therefore improved (p. 11).

Summary

The importance of financing in influencing the structure and function of mental health systems has been well-documented. Federal and state government are experimenting with a number of approaches for controlling the costs of mental health treatment. Astute planners will do well to study the trends signalling inevitable reimbursement changes, and adjust their calculations about psychiatric bed needs according to future funding changes. Since implementation of each approach summarized above can be expected to result in decreased utilization and ALOS for inpatient psychiatric units, future financing developments must be considered in developing valid and reliable need projections for acute psychiatric bed capacity.

In addition, the rapid expansion of cost-effective community-based programs can be expected to further decrease inpatient utilization. The combination of these financing and programmatic developments are having a dramatic impact on reducing inpatient utilization and capacity in numerous parts of the United States.

CHAPTER 3: CURRENT STATE-OF-THE-ART IN PSYCHIATRIC BED NEED METHODOLOGIES

• Advances in Data for Predicting Mental Health Needs

Just as the potential implementation of psychiatric DRGs under the Medicare prospective payment system has spurred research about the characteristics and utilization of current psychiatric inpatient facilities, other recent activities are increasing the capacity of planners to estimate with greater validity the prevalence of mental disorders of populations in given communities. Planners have perennially and forcefully criticized the paucity of valid information available concerning psychiatric needs. Two recent activities address these issues and provide an epidemiological and service need framework on which to base planning assumptions about mental health resources.

Although not intended as a study of the prevalence of mental health service needs, the Graduate Medical Education National Advisory Committee (GMENAC) reports on physician requirements in various specialities, including psychiatry (40). Although the focus of the report is on projection of unmet needs for psychiatrists, a corollary benefit has been the development of prevalence estimates and their distribution across four types of services: ambulatory treatment; partial hospital programs, including day treatment, group homes, foster care, and other intermediate treatment arrangements; acute treatment; and 24-hour settings, which include long-term institutional care in nursing homes, ICF/MRs, state and county mental hospitals, but do not include prisons. A Delphi panel process was used to develop the GMENAC estimates. The Delphi panel

developed what they considered to be a "conservative" prevalence rate, stating that 12 percent of the adult population are in need of some type of mental health or substance abuse treatment intervention. Table 8 depicts the Delphi panel's estimates of prevalence by types of disorders. By 1990, 11,875 persons per 100,000 adult population are projected to need mental health and substance abuse services. This 12% prevalence rate compares with a 14.4% prevalence rate found in the NIMH Epidemiologic Catchment Area study described below.

Table 9 provides the Delphi panel's estimates of the need by the four treatment settings referenced above. Panelists indicated that approximately 95 percent of persons experiencing mental disorders should receive ambulatory treatment. They also indicated that ten percent of mentally ill individuals should be in a partial hospitalization program, 12.5 percent should receive acute psychiatric treatment; and only five percent be treated in long-term facilities. The majority of institutional care was expected to be devoted to the elderly population with organic brain syndromes. The panel also noted that acute hospitalization was most beneficial in the treatment of alcohol addiction, which represents nearly one-half of all acute hospitalization needed. They recognized overlap in the categories, with the exception of ambulatory and long-term institutional care, since some patients would be treated in an acute hospital setting and also receive ambulatory or partial hospital treatment.

A significant finding is that alcohol addiction was projected by the GMENAC panel to constitute approximately one-half of the acute psychiatric admissions for mental health care. Alcohol addiction will also be shown to

TABLE 8

DELPHI PANEL ESTIMATES ON PREVALENCE RATES BY 1990 OF MENTAL DISORDERS PER 100,000 ADULTS REQUIRING MENTAL HEALTH SERVICES

Condition	1990 Rate per 100,000 Adult Population Requiring Mental Health Services
Schizophrenia and Other Psychoses	900
Affective Disorders: Psychoses	980
Affective Disorders: Neuroses	3,000
Neuroses and Personality Disorders	2,000
Alcohol Addiction	2,000
Drug Abuse	500
Mental Retardation	495
Organic Brain Syndrome	1,000
Other	1,000
TOTAL	11,875

SOURCE: Graduate Medical Education National Advisory Committee. Physician Requirements - 1990 - For Psychiatry, 1981, p. 21.

TABLE 9

DELPHI PANEL ESTIMATES ON THE RATE PER 100,000 ADULTS WITH MENTAL DISORDERS REQUIRING CARE, BY TREATMENT SETTING: 1990

Conditions	Ambulatory	Partial	Acute	24 hr.	Total
Schizophrenia, and Other Psychoses	801	270	180	99	900
Affective Disorder Psychoses	960	29	88	20	980
Affective Disorder Neuroses	2,940	90	210	60	3,000
Neuroses and Personality Disorders	1,980	60	60	20	2,000
Alcohol Addiction	2,000	300	700	-	2,000
Drug Abuse	500	50	75	-	500
Mental Retardation	420	123	24	75	495
Organic Brain Syndrome	650	200	100	350	1,000
Other	990	20	50	-	1,000
Total	11,241	1,143	1,488	624	11,875

*This treatment includes all therapeutic intervention provided from all sources, including general physicians, psychiatrists, psychologists, psychiatric nurses and psychiatric social workers.

SOURCE: Graduate Medical Education National Advisory Committee. Physician Requirements - 1990 - For Psychiatry, 1981, p. 21.

be prominent in the subsequent discussion of a major epidemiological approach to assessing mental health needs. Also, in addition to psychiatric bed requests, many states are receiving requests for separate hospital units and freestanding facilities dedicated solely to the treatment of alcoholism and other substance disorders. If one half of the acute psychiatric admissions are for alcohol addiction, serious overbedding may result if planners do not maintain simultaneous knowledge of both mental health and alcoholism services. If alcohol addiction, for example, is being treated in separate discrete units, the need for specialized acute psychiatric beds could be proportionally reduced. With knowledge of bed needs for 28-day facility-based alcohol rehabilitation, dual-diagnoses, and overlap in the populations for inpatient services, planners will be more able to avoid duplication of alcohol treatment service provision and excess bed capacity for either disability.

The other major activity, the NIMH Epidemiologic Catchment Area (ECA) Program offers significantly more accurate estimates of the prevalence of various mental disorders. This program resulted from concerns about data deficits identified during the development of the 1977 President's Commission on Mental Health. Reviews of findings from the President's Commission and other recommendations produced a consensus that the following information was needed (41):

- prevalence rates of specific mental disorders as defined more uniformly by the Diagnostic Standards Manual, Third Edition (DSM-III);

- combined community resident and institutionalized population rates to represent the total population;

- longitudinal data on the course of specific mental disorders in terms of new case onset (i.e., incidence), recurrence, or remission rates;

- data on the use, by persons with specific mental disorders, not only of specialty mental health services, but also of the entire range of general medical and other human services that compose the U.S. de facto mental health services system;

- the utility of DSM-III diagnostic categories, as currently defined, to discriminate useful subgroups in both untreated and treated populations; and

- a demonstration that replicable results can be obtained from multiple psychiatric epidemiology surveys when methods are standardized.

Starting in September 1978, NIMH began selection of five sites to constitute the NIMH ECA program. The first site chosen was New Haven (Yale University). In the following two years, Baltimore (Johns Hopkins University), St. Louis (Washington University), Durham, North Carolina (Duke University), and Los Angeles (UCLA) were selected. At present, preliminary data are available from the community survey studies undertaken in New Haven, Baltimore, and St. Louis. Although the research has

generated a wealth of useful epidemiological information, only findings that have a direct bearing on estimating the need for mental health resources in a given community will be highlighted in this paper.

In a compilation of data about six-month prevalence rates of psychiatric disorders in the three initial communities, the following preliminary findings were reported:

(1) The comparison of prevalence rates across the three ECA sites indicates considerable similarity of results at all sites. The only major discrepancy is a much higher rate of phobic disorders found in Baltimore, which may be partially explained by methodological factors in the collection of data (42, 43).

(2) Both Myers et al. and Robins et al. report a prevalence estimate that 25 percent of community residents that will be affected by at least one mental disorder during their lifetime. This lifetime prevalence rate compares with a yearly prevalence rate averaging 14.4 percent for community residents (Myers, et al.). These prevalence rates do not include institutionalized populations (42, 43).

(3) In overall estimates of lifetime prevalence rates for 15 DSM-III disorders (Table 10), researchers found that alcohol abuse or dependence is the most common psychiatric disorder among community residents, affecting one out of every seven adults. This finding coincides with the estimates of the GMENAC Delphi

TABLE 10

OVERALL ESTIMATES OR LIFETIME PREVALENCE RATES OF 15 DIAGNOSES

DSM III Diagnosis	Estimate of Prevalence Rate %*
Alcohol abuse/dependence	14.6
Simple phobia	6.6
Major depressive episode	5.2
Drug abuse/dependence	1.7
Agoraphobia	3.8
Dysthymia	3.0
Antisocial personality	4.1
Obsessive-compulsive	2.5
Panic disorder	1.5
Cognitive deficit	1.2
Schizophrenia	0.5
Manic episode	0.6
Schizophreniform	0.1
Somatization	0.1
Anorexia nervosa	0.1

*Based on site mean, omitting outliers and compensating for omitted questions.

SOURCE: Lee N. Robins, Ph.D., et al., "Lifetime Prevalence of Specific Psychiatric Disorders in Three Sites," (Draft paper), n.d.

panel about the primacy of alcohol disorders in need estimates for acute psychiatric beds. Simple phobia was the next most common disorder, affecting one out of every nine community residents. Schizophrenia affects less than one percent of those residing in the community (43).

(4) For many diagnoses, a clear pattern of sex predominance was found. Antisocial personality, alcohol abuse/dependence and probably drug abuse/dependence were found to be predominantly male disorders. Rates of major depressive episodes, agoraphobia, and simple phobia were higher for females in all sites (43). However, the researchers state that "in no site were women found to have a total rate of all of the covered disorders that was higher than the rate for men" (p. 953). This finding differs from the results of several "earlier surveys (which did not provide specific diagnoses) indicating that more women experience mental disorders and that they have more psychiatric symptoms than men. It is likely that these earlier findings were due to a lack of inquiring into diagnoses such as alcoholism, drug dependence, and antisocial personality where men predominate" (p. 953).

(5) Researchers expected to find a linear relationship between age and mental disorders, with more mental disorders among the older population. Instead, the age group with the highest of disorders was the 25-44 years old group. The youngest group sampled, 18-24 years of age, had the next highest rate (43).

(6) Differences between blacks and other racial groups with respect to rates of psychiatric disorder were generally modest and not statistically significant. Black rates were higher than others in all three sites with respect to four diagnoses: simple phobia, agoraphobia, drug abuse/dependence, and cognitive impairment (43).

(7) With respect to education, college graduates had significantly less psychiatric disorders than other persons in nine of the 15 diagnoses (43).

(8) With respect to urbanization, the inner-city environment was associated with higher rates of mental disorders (43).*

(9) The service utilization data is not as uniform across sites as the prevalence data. The data on utilization indicates that 6-7 percent of the adult population in the three ECA sites sought assistance for a mental health problem from either a general medical care provider or a mental health provider during the previous six-month period (44). Extrapolations suggest that approximately half of the annual prevalence rate of 14.4 percent of individuals experiencing mental disorders each year seek treatment.

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*However, St. Louis is the only site thus far that included a rural or small town catchment area. The North Carolina site is expected to yield more information about prevalence in rural areas.

(10) For all sites, total ambulatory treatment is substantially greater in the presence of a recent mental disorder, a finding consistent with results of research on clinic patients with psychiatric diagnoses.

(11) Increased service utilization extends to hospital admissions for physical conditions during the previous year (44).

- Current Status of Planning Methodologies

The findings from the GMENAC panel and the NIMH ECA research can significantly assist planners in developing more valid projections of mental health service need and utilization. However, two recent surveys of planning methodologies for psychiatric bed need reveal that health planning agencies, at both the state and local levels, have not incorporated many of the data and research advances presented in this paper for developing valid and reliable planning methodologies for inpatient or community-based mental health services.

A survey including each state health planning and development agency (SHPDA) was conducted in 1983 by Goplerud and Guillemette (3) to investigate planning methodologies utilized to determine psychiatric bed need in CoN applications. Appendix I provides the results of the survey by individual states. The survey results are likely to be of concern to health policy makers. The authors found that very few SHPDAs have developed sophisticated planning methodologies. Only four of the 25 SHPDAs responding make use of multiple methods combining a quantitative method

with qualitative weighting factors. Although thirty five percent used a quantitative formula for projecting need, most formulas were a simple bed to population ratio or an inpatient days to population ratio.

Seventeen of the 25 SHPDAs projected need from past utilization, with most using some variation of the Hill-Burton hospital bed need methodology. Finally, 13 states had no explicit criteria for estimating psychiatric inpatient bed needs. From these results, the authors conclude:

> Planning methods used are generally simple, cheap, unreliable and inconsistent from state to state.... These results should be grounds for concern given the unanimous judgment of evaluation researchers that reliance on any single need assessment method, and particularly reliance on either historical utilization or bed-to-population methods is a 'recipe for chaos'.... Our results suggest that knowledge generated by needs assessment research has not diffused adequately to the planners and policymakers explicitly charged with directing the development of acute psychiatric services.... From a public health perspective, our findings raise the possibility that the development of community-based mental health care may be limited by planning methods heavily dependent on past utilization of widely varying bed to population ratios (pp. 12-15).

However, the authors noted that 18 states at the time of the survey were reviewing and revising their existing methodologies for assessing psychiatric bed needs. Nonetheless, they strongly assert that attempts to rationally plan an integrated mental health care system require more thorough knowledge of mental health and greater commitment of planning resources than is currently evident.

In 1983, the North Central Georgia HSA (responsible for Atlanta) and the Georgia SHPDA reviewed psychiatric methodologies being utilized by six states and ten local health systems agencies (45). The results of their

survey, included as Appendix II, are similar to the research by Goplerud and Guillemette, although four of the ten HSAs had methodologies that were more sophisticated than any that were found on the state level.*

Four inpatient bed planning methodologies will be presented in this paper. The first one will be the methodology developed by the Georgia SHPDA in 1984. This methodology demonstrates the use of GMENAC estimates, with a few variations based on current utilization and the array of public and private sector resources in the state. The second methodology was developed by George Warheit and Associates through research conducted by the Department of Psychiatry at the University of Florida in Gainesville. Although the data base has not been updated since 1980, Warheit's methodology demonstrates the translation of epidemiological findings into a resource allocation methodology. As epidemiological data on mental health needs become more readily available, planners can substitute prevalence rates that are based on state or local variations and are more recent. The final two methodologies, the California Community Mental Health Programs model and the Nebraska Mental Health Desired Service System (DSS), project bed need estimates based on all services in an integrated mental health system. Although they are rudimentary in some aspects, they represent the only statewide attempts to date which recognize that mental health services are interrelated and include far more resources than inpatient beds. Except for the Georgia GMENAC methodology, each methodology requires states

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*These were: Fingerlakes Health Systems Agency (Rochester, New York); North Central Georgia HSA (Atlanta); HSA of Southwestern Pennsylvania (Pittsburgh); and West Michigan HSA (Grand Rapids).

to commit resources to analyze the mental health system and systematically plan its desired future direction.

All of the methodologies presented in this paper are predicated on an assessment of "needs" that does not rely solely on current inpatient utilization. The GMENAC prevalence estimates are a good first step away from the utilization and bed to population ratio approaches currently used by the majority of state planning entities. However, it is hoped that all states will develop methodologies that recognize the need for a variety of mental health service alternatives which can and do have major impacts on the utilization of inpatient treatment.

Each of the methodologies will be presented within a common format: type of methodology, source of data, basic assumptions, formula, adjustment factors used, and advantages and disadvantages.

- GEORGIA STATE HEALTH PLANNING AND DEVELOPMENT AGENCY METHODOLOGY (See Table 11, 46)

TYPE OF METHODOLOGY: Need is based on national prevalence estimates according to a Delphi panel.

SOURCE OF DATA: Estimates are made from the Graduate Medical Education National Advisory Committee (GMENAC) Delphi panel for psychiatry.

BASIS ASSUMPTIONS: To utilize this methodology, basic assumptions must be made concerning:

- geographic areas to be served by the inpatient service array;
- setting an average length of stay per admission;
- desired occupancy of psychiatric facilities; and
- whether to include substance abuse (i.e., alcohol addiction and drug abuse) needs in the projections for acute psychiatric beds, or whether to develop separate dedicated beds for these disorders. The GMENAC prevalence rate, including substance abuse in psychiatric facilities, is 1,488 persons per 100,000 in need of acute psychiatric services. If alcohol addiction and drug abuse are treated separately, the prevalence rate is 713 persons per 100,000 population for acute mental disorders* and 775 persons per 100,000 in need of resources for alcohol addiction and drug abuse.

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*However, this includes those with a major diagnosis of mental retardation and other diagnoses that were not included in the final prevalence rate set by the Georgia SHPDA.

TABLE 11

ADULT PSYCHIATRIC/SUBSTANCE ABUSE
BED REQUIREMENTS

State of Georgia, 1990

	Psychiatric	Substance Abuse
1990 Population	4,566,105	4,566,105
GMENAC Prevalence rate per 100,000	538	775
Projected Admissions	24,566	35,387
ALOS	25	13
Projected Patient Days	614,150	460,031
Average Daily Census	1,683	1,260
Target Occupancy Rate	85	85
Total Beds Required	1,980	1,482
Beds Available		
Surplus/Deficit		

SOURCE: Georgia State Health Planning Agency. Final Report of the Psychiatric Inpatient Services Technical Advisory Committee, April, 1984.

FORMULA: The steps in determining bed requirements using this methodology are as follows:

1) Determine prevalence rates per 100,000 adult population with mental disorders, by type of condition, by treatment setting.

2) Designate service areas or a method for determining service areas for inpatient services.

3) Project admissions to the acute inpatient treatment setting by type of condition (e.g., substance abuse and mental health) by applying prevalence rates to the population in the service area.

4) Determine ALOS by type of condition through examination of the length of stay in existing facilities with similar programs.

5) Project patient days by multiplying projected admissions by expected ALOS.

6) Convert patient days to average daily census (ADC) by dividing by 365 days per year.

7) Determine a desired occupancy standard.

8) Compute bed requirements by dividing average daily census by the occupancy standard.

9) Compare existing bed supply in the service area with bed requirements:

    a) Inventory of beds by type;
    b) Compute surplus or deficit.

Table 11 provides an example of this formula applied to the state of Georgia, using the assumptions of the method.

ADJUSTMENTS: Georgia made an assumption, based on assessment of utilization patterns in 1982, that 50 percent of the prevalence of mental disorders and substance abuse among adults will be served in the state public hospital system and 50 percent in the private sector.

ADVANTAGES:

- It is easy and cost-effective.
- It can be implemented easily.
- It is based on assumed need for services rather than on actual use of existing services.
- It can distinguish between substance abuse and mental disorders, and provide estimates of other services.
- It provides estimates for other mental health service components besides acute inpatient psychiatric treatment.

DISADVANTAGES:

- The GMENAC estimates may not account for the unique needs in individual states.
- The GMENAC estimates do not account for differences in treatment approaches among types of facilities.
- The methodology projects a significantly higher number of inpatient psychiatric beds than are needed in a comprehensive, community-based mental health system.

• WARHEIT METHODOLOGY (2)

TYPE OF METHODOLOGY: Needs assessment is based on epidemiologic research. Methodology employs clinical, social, and statistical models.

SOURCE OF DATA: A common method for estimating rates of various disorders within a population is that of extrapolating from one group on which valid and reliable data have been obtained to another about whom less is known. This method of extrapolating from epidemiologic findings is employed in this methodology as a technique for estimating the prevalence of psychiatric disorders. The source of data for this methodology are a series of epidemiologic field studies carried out in Florida over a period of 12 years. The major findings have been reported in numerous periodicals and a book (47). The end result of these studies was the establishment of rates for mental disorders, based on various demographic factors.

BASIC ASSUMPTIONS: To utilize this methodology, the following basic assumptions must be made:

- information obtained regarding the target population's psychiatric symptoms, social role performance, capacity to maintain meaningful object relationships, and the ability to achieve a sense of meaning and satisfaction from daily life are correlated with psychological well-being;
- reduction in the level of psychological well-being can be equated with need for mental health services;
- the estimated rates of mental disorder are valid and can be applied to the population being planned;
- the rates among three classes of need--low, moderate, and high--can be translated into treatment modalities utilized by mental health agencies, and individuals with high needs are potentially those most likely to utilize inpatient treatment; and

- an average length of stay per admission can be established.

FORMULA: The steps in determining bed requirements using this methodology are as follows:

1) Determine the total number of adults (age 18 and over) in the service area.

2) Multiply the population by the appropriate risk rate. For general planning purposes, the overall high risk rate for the general population (.024) can be used. Risk rates for differing subgroups may also be utilized.

3) The total derived from multiplying the population by .024 must be corrected by a 75 percent weighting factor. The weighting figure is based on various clinical and correlational studies that indicate 75 percent of the high risk group would benefit from inpatient services in a calendar year.

4) The next stage in the process is to multiply the weighted high risk group by ALOS per episode, with the ALOS for acute beds being less than 30 days.

5) Once the ALOS has been determined, the number of persons in the high risk group (weighted by the 75 percent factor) is multiplied by the number of days regarded as an average length of stay. To obtain the number of acute inpatient beds necessary to meet these total patient day needs, the number is divided by 365.

6) Adjust this calculation of needed beds by a desired occupancy rate.

7) Subtract existing bed capacity from the estimated need.

In summary, the formula for estimating the acute psychiatric bed needs of an area is as follows:

$$\frac{P \times .024 \times 75\% \times L}{365} = \text{Bed Needs at 100\% occupancy}$$

P = population 18 years of age and over

.024 = general risk rate

75% = percent of high risk group likely to have an episode during a calendar year

L = average length of stay

365 = days in year

This total can be adjusted in keeping with an occupancy rate (e.g., 90 percent; 80 percent; etc.).

ADJUSTMENTS: As noted above, the methodology can be adjusted by changing length of stay and/or occupancy level assumptions and standards.

ADVANTAGES:

- It is easy and cost-effective, if all assumptions are considered valid.
- It is based on estimates of need for services rather than on actual use of existing services.
- Its development is empirically and theoretically grounded.

DISADVANTAGES:

- Rates based on the Florida population may not be applicable to other areas, and replication in other states or local communities would be costly.
- Assumptions concerning the correlation between those at high risk and use of inpatient services are questionable.

- The methodology projects a significantly higher number of inpatient psychiatric beds than are needed in a comprehensive, community-based mental health system.

- THE NEBRASKA MENTAL HEALTH DESIRED SERVICE SYSTEM (DSS) MODEL (48, 49)

TYPE OF METHODOLOGY: The model is based on estimated needs of identified service categories. The DSS provides service categories, general definitions, estimated needs, descriptions of persons to be served, assumptions, and qualifications. The model is interactive and presents a coordinated approach to mental health service delivery.

SOURCE OF DATE: The DSS model was developed under the sponsorship of the Nebraska Department of Public Institutions (which includes the state mental health agency) by using a panel of experts (i.e., key informants) well acquainted with the mental health problems of Nebraskans. The DSS work group was designed so that its collective experience would be representative of the public and private sectors, administrative and service delivery domains, rural and urban areas, medical and non-medical approaches, and inpatient and outpatient settings (See Appendix III for Executive Summary of the report).

BASIC ASSUMPTIONS: The Nebraska DSS model makes the following basic assumptions:

- the mental health system should ensure continuity of care and coordinated activities between all provider sectors;
- the system developed should be based on the existing six regions delineated in the Nebraska mental health system;
- mental health service components should be based on existing entities in the system, rather than redefining services or programs; and
- the model should focus on the specialized mental health services sector, and not include the general medical care sector or human service sector (even through they provide mental health services as part of their mission).

FORMULA: The Nebraska DSS Model is predicated on a two stage process:

1) The first stage involved determination and description of the service categories to be included in the DSS Model. The panel decided that, to the degree possible, they would review existing services, and would adopt or modify definitions rather than invent new categories. For each service category, a description of persons to be served was developed, along with an estimated average length of stay proposed and assumptions or qualifications. The initial set of service categories and their definitions were continually refined throughout the process.

2) The second stage involved estimation of the level of resources needed for each service category. Rather than the traditional unimodal approach of inpatient bed need, the group sought to consider the model as a whole, making their estimates based on two assumptions: all services were in place and functioning as intended, and judgments of the relative prevalence of need for the various services. Assuming 1980 population figures, each work group member independently estimated the resources needed for each of the service categories, and a final set of estimates were arrived at through group discussions.

The final set of estimates is included in Table 12. This final set includes input from the extensive public review process and modifications that resulted from that process.

ADJUSTMENTS: The Nebraska DSS Model provides the initial foundation and framework for developing a coordinated and comprehensive mental health system. It is expected that the model can be adjusted and refined to meet regional variations as well as the changing needs of the mental health population over the years.

TABLE 12

NEBRASKA MENTAL HEALTH DESIRED
SERVICE SYSTEM SUMMARY TABLE

	Estimated Average Length of stay	Estimated Need Per Nebraska's 1980 Population*	Nebraska's Current Resources**	Percent of Need Met
REGIONAL LEVEL SERVICES				
Emergency	1 Episode	60 Epis/Day	20 Epis/Day	33%
Outpatient	8 Hours	1,500 Hrs/Day	1,273 Hrs/Day	85%
Short-Term Inpatient	15 Days	355 Beds	682 Beds	192%
Transitional	45 Days	300 Beds	56 Beds	19%
Intermediate	90 Days	450 Slots	418 Slots	93%
Community Living Services	1 Year	2,156 Slots	80 Slots	6%
Supportive/Sheltered Employment	18 Months	864 Slots	6 Slots	1%
Residential Alternatives	3 Years	1,884 Beds	223 Beds	12%
Structured/Supportive Long-Term Residential	5 Years	1,500 Beds	96 Beds	6%
MULTI-REGIONAL SERVICES				
Specialized Children's Residential	6 Months	30 Beds	10 Beds	33%
Specialized Adolescent Residential	9 Months	110 Beds	4 Beds	4%
Extended Inpatient	1 Year	160 Beds	320 Beds	200%
STATE LEVEL SERVICES				
Severely Disturbed and Disruptive Children Inpatient	1 Year	15 Beds	18 Beds	120%
Severely Disturbed and Disruptive Adolescent Inpatient	2 Years	30 Beds	54 Beds	180%
Security Inpatient	3 Years	125 Beds	128 Beds	102%

* Nebraska's 1980 population figure is 1,569,825.
** Source: Hartig and Lee (1983).

ADVANTAGES:

- It clearly defines the specialty mental health system, excluding substance abuse and mental retardation services.

- It represents an assessment and utilization of both public and private sector resources, thus conceptualizing a single-tier system of treatment.

- The DSS promotes such useful functions as planning, fiscal management, system management, human resources development, and services coordination.

DISADVANTAGES:

- The model reflects a high dependence on traditional inpatient services. However, the model could be used in an effort to shift the allocation of state and federal resources to a more balanced system of mental health services.

- The model may not be applicable to other states and local communities.

- The composition of the key informant group may unduly influence the method, assumptions, and formula. The Nebraska panel had a preponderance of psychologists, while other panels may have a preponderance of some other professional group.

- The DSS model includes only direct services. A number of other service related activities, such as case management, intake, and referral, are excluded. Also, indirect types of services such as prevention and education are important.

- With the exception of a few age specific service categories, the DSS model does not address special populations by age, sex, or racial/ethnic group.

- THE CALIFORNIA MODEL FOR COMMUNITY MENTAL HEALTH PROGRAMS (50)

TYPE OF METHODOLOGY: The model is based on development of normative standards for various service components in the mental health system. The model promotes an interactive and coordinated approach to mental health services. The manner in which the model specifies types and amount of services needed complements classical needs assessment approaches.

SOURCE OF DATA: The model is based on a consensus among a coalition of mental health providers and consumers in the California mental health system. Expert judgment was used to identify the necessary components for a programmatically sound community mental health program. The usual specific techniques of needs assessment (e.g., community-based information gathering, service utilization analysis, and use of social indicators as predictors of need) were all considered in arriving at the proposed standards. The Mental Health Association in California, a volunteer advocacy group for mentally ill persons and mental health services, facilitated the process.

BASIC ASSUMPTIONS: The California Model for Community Mental Health Programs makes several basic assumptions about the organization of services. Assumptions include the following:

- the mental health system must be conceptualized as an interlocking system (i.e., failure to develop one aspect of the system will impair the overall functioning of the system);
- it is a fundamental right of individuals to be served in the least restrictive setting that can effectively meet their needs;
- a balanced system addresses "least restrictiveness" in terms of both attitudes toward clients and an environment which can help create flexible and individualized services;
- emphasis should be placed on the development of a full system of rehabilitative alternatives to inpatient settings;

- a comprehensive, balanced mental health system includes levels of treatment which are not only singularly available to clients who require specific treatment, but are linked to one another in a network to provide the most appropriate level or array of service for each client;

- services, including preventive services, must be provided in a manner that is culturally, linguistically, and age appropriate to the needs of the client;

- counties are the appropriate service area level, and local needs and variations must be taken into account;

- the model must contribute to a flexible and dynamic approach for responding to the changing needs of mentally ill populations;

- strong and capable leadership is required to manage mental health services resources; and

- continuous monitoring is needed with regard to quality of care and program implementation.

FORMULA: The California Model has no specific formula for acute psychiatric beds. Instead, a set of minimum standards are developed for a basic set of services. For each service, a population-based standard is expressed in terms of a minimum level of service per 100,000 population. Table 13 provides the summary of standards per 100,000 population. Appendix IV contains the full report that provides greater detail about the definitions of services, types of patients served, service characteristics, programs, and facilities required. The model specifies that there should be a minimum of 15 beds per 100,000 for 24-hour acute intensive care. Some planners would argue that this level is low. However, when crisis stabilization, transitional treatment, and long-term rehabilitative services are locally available and integrated with the inpatient service, acute hospitalization is reduced, and this level can adequately serve the needs of the patients.

TABLE 13

SUMMARY OF MENTAL HEALTH SERVICE STANDARDS PER 100,000 POPULATION

Program Function	Program/Facilities Required	Estimated # Persons Served Annually (a)	Estimated Annual Units of Service
1) 24-Hour Acute, Intensive Care (a) Hospital (b) Non-Hospital	15 Beds	310	4,654 days
2) Short-Term Crisis Residential	10 Beds	220	3,102
3) 24-Hour Transitional	20 Beds	40	6,570
4) Long-Term Rehabilitative Care	40 Beds	40	13,870
5) Out-of-Home Placement (a) Supervised Out-of-Home Placement (b) Semi-Independent Living	60 Beds 15 Beds	60 30	(Program costs included in Comm. Support & other Categories)
6) Emergency Services A. Eval. Trmt. & Holding B. Crisis Intervention C. Mobile Crisis	Emerg. Unit 2 F.T.E. (c) On-call	1,000 1,820 150	1,000 1,820 150 visits
7) Acute Day Treatment	9 F.T.E.(c)	160	7,000
8) Outpatient	20 F.T.E.(c)	2,000	16,250
9) Case Management	8.6 F.T.E.(c)	400	4,800
10) Community Support	13 F.T.E.(c)	600	n.a. (d)
11) Community Outreach Services	6 F.T.E.(c)	n.a.	6,000 hrs
12) M.H. Advocacy	.5-1 F.T.E.(c)	n.a.	n.a.
13) Services to Justice System	n.a.	520	n.a.

a) Persons will receive services in several programs, therefore this column will not yield an unduplicated client count.

b) At [illegible] rates. Administration costs are not included.

c) All full-time equivalents (FTE) refer to professional staff only.

d) n.a. = not applicable

SOURCE: California Mental Health Association. A Model for California Community Mental Health Programs, 1980, p.27.

ADJUSTMENTS: The California model presumes that local planners will adjust the methodology to fit the particular needs of the county. The minimum standards were based on a statewide estimate level and acknowledged the need for counties to make certain adjustments.

The model also recognizes that special considerations must be kept in mind when applied to sparsely populated areas. Although all services in the continuum should still be made available, they may be organized differently. First, more than one category of service may be provided by the same staff depending on the particular needs of individual clients at that time. Such functions as outpatient services, consultation, education and case management could be handled by the same staff. Second, the quantitative level of the model may fluctuate in small programs and it may be possible to provide comparable functions in a smaller number of settings than is specified in the model. Third, services to mental health clients may be provided in close collaboration with other local agencies and professionals. Finally, when the feasibility for a category of service is found to be low, regional services may be developed by inter-county agreements, under local control, and designed to serve a natural catchment area.

Special minority considerations must be examined before application of the model. It is suggested that treatment services for ethnic minorities, for example, combine education, crisis intervention, outreach, and various therapeutic approaches.

The model also recognizes the need for a separate category of forensic mental health services to persons who are or have been under the criminal justice system's jurisdiction. The service needs of this target population fall within the spectrum of services described, but due to the unique nature of this population and the need for ongoing credible interaction with the justice system, programs must often be specifically designed.

Finally, the model includes specific considerations for children and adolescents as well as geriatric patients. (These standards may be found in the full report in Appendix IV.)

ADVANTAGES:

- It provides a framework for the development and financing of a comprehensive mental health system so that individual and community needs can be met.

- It can be used for long-range planning and budgeting. If applied to a service system, it eliminates the need for categorical funding as specific protection for any of the elements described in the model.

- It provides the necessary common terminology to facilitate coordination of the various levels of health planners, including county mental health authorities, local health systems agencies, and state health planning and mental health authorities. Especially for health planners, it allows them to understand how the availability of a continuum of care affects the need for acute services which is often their purview under CoN.

- It provides criteria and standards that can be incorporated into the CoN process for reviewing proposals for new inpatient services.

DISADVANTAGES:

- The model was initially formulated on counties' "Short-Doyle population", who are public sector mental health service recipients in California. Such persons generally are experiencing severe mental disorders, such as schizophrenia and affective disorders, or are considered "difficult-to-treat" because of various clinical and sociodemographic characteristics. Thus, the model did not consider the population of Medi-Cal and private sector patients in the initial methodology. This deficiency was somewhat remedied, as shown in the full report in Appendix IV which provides an estimated total need for mental health services and generalized pattern of service provision for

the Medi-Cal, private sector, and Short-Doyle populations. Nevertheless, this effort to improve the model retains the concept of a multi-tiered system of care.

- Since it is based on perceived needs, current utilization data, mental health statutes, and organizational structures that exist in California, the methodology may not be applicable to other states or local areas without making adjustments for these variables.

CHAPTER 4: SYNTHESIS AND SUMMARY OF MAJOR PLANNING ISSUES

This paper has attempted to describe the state-of-the-art in planning methodologies for the development of acute inpatient mental health services in the United States. Several trends in health care reimbursement and mental health practice are likely to have serious and profound influences on psychiatric resource allocation and the need for acute inpatient capacity:

(1) Placement of acute psychiatric beds within a prospective payment system (e.g. DRGs or some variation thereof) will have a major impact on inpatient mental health services. If the experience of hospital beds in other sectors is comparable, psychiatric beds will have shorter lengths of stay, more selective admission criteria may be developed, and more extensive utilization review of beds will be instituted. For-profit facilities will increase their rate of transferring patients to public sector facilities. Communities may utilize significantly fewer acute psychiatric beds than is presently indicated.

(2) The growth of prepaid and capitated health plans in both the private and public sector will decrease inpatient utilization. Under these plans, mental health services are often limited and they have financial incentives to encourage preventive, ambulatory, and other less costly services rather than hospital treatment. With a growing percentage of the population becoming enrolled in such plans, it is expected that the demand for hospital-based services, in general, will

decrease. Decreases in the utilization of hospital services will affect the utilization of psychiatric beds.

(3) The distinction between inpatient mental health and alcohol treatment beds is increasingly recognized. Although there is overlap in the populations of psychiatric and substance abuse clients, there are also important distinctions. Until quite recently, alcohol rehabilitation programs were not nearly as accessible. However, with increasing demand for alcohol rehabilitation inpatient programs, some of the demand for psychiatric hospitalization should be expected to decrease. Both community epidemiological data and utilization data indicate that almost half the diagnoses of mental disorders and utilization of psychiatric facilities are for substance abuse disorders. Therefore, if the specialized substance abuse field is expanding, some of the clients currently treated in mental health facilities may be more appropriately served in specialized substance abuse facilities.

(4) There is an increasing emphasis, especially in the public sector, on the development and expansion of less costly community-based alternatives to hospital care. The research literature indicates that alternative services such as day treatment programs, therapeutic group homes, Community Support Programs, and similar interventions are as, if not more, effective than inpatient psychiatric services. Thus, more states are focusing attention upon the development of alternatives to hospital care, especially when proven to be more cost-effective.

(5) Another recent development, precipitated especially by anticipated changes in reimbursement, is the proliferation of epidemiologic mental health research. This research on resource utilization and prevalence of mental disorders is providing unprecedented information about mental health services use and need. Such data have great portent for more effective planning of mental health services and development of comprehensive mental health systems.

Unfortunately, current trends and recent data advances are not reflected in many psychiatric methodologies currently being utilized by state or local health planning agencies. In fact, the overwhelming majority still rely on demand-based methodologies that project current utilization patterns into the future through Hill-Burton formulas or variations thereof. Furthermore, the majority of health planning agencies have methodologies that address only one component of the mental health care system -- acute psychiatric beds. Such methodologies not only perpetuate fragmentation and over-emphasis on more costly and often less effective hospital-based services, but also neglect future trends that will have significant impact on the need for and utilization of acute psychiatric beds. Thus, most health planning agencies are not utilizing more sophisticated methodologies or addressing mental health policies that call for changes in mental health service delivery systems. This paper has described four methodologies that emphasize addressing the <u>needs</u> of the mentally ill population rather than the <u>demands</u> for services influenced by reimbursement policies, psychiatric practices and policies, or institutional priorities.

Greater interest and demand for improved planning for mental health and substance abuse services comes at a time when many health planning agencies have fewer staff in general as well as few staff members with intimate knowledge of complex mental health systems. This is one of the principal reasons for the "lack of sophistication" Goplerud and Guillemette (3) observed in health planning methodologies and mental health criteria and policies. Another reason for the lag between knowledge and actual practice is that Certificate of Need in many states focuses only on acute services in the mental health system, and planners are consequently unaware of or interested in other available mental health resources in the community that may influence the need for acute psychiatric beds. Applicants for CoNs usually indicate other similar resources (e.g., other acute psychiatric units) but seldom reference resources that provide similar services in settings other than inpatient treatment (i.e. day treatment programs). Health planners should not continue to use utilization methodologies exclusively or continue to rely on fragmented component planning for mental health or substance abuse services. Even if CoN regulations cover only some mental health services, it is imperative that planners maintain a system-wide perspective in their deliberations.

Given this state of affairs, the following recommendations are are made to improve inpatient mental health planning:

1. The GMENAC methodology, or a methodology based on prevalence estimates, should be adopted as an interim methodology for health planning agencies still using utilization methodologies based on

projections of current demand.* The GMENAC methodology is also capable of projecting both acute psychiatric and substance abuse beds separately, if desired.

2. Before recommending bed allocations, planning agencies should show historical and projected expressed demand in a comparison table with desired calculated utilization.

3. State health planning and development authorities should increasingly coordinate their mental health planning efforts with the state mental health authority.

4. With the assistance of the state mental health authority, the SHPDA should establish a task force to address the resource needs of the mental health system and develop methodologies for determining the allocation of resources. Such an effort may be similar to efforts undertaken by Georgia, Nebraska, and California. To promote an integrated system, it is critical that both public and private sector providers be represented. The recommendations emanating from such a task force should be used

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*There are a few very sophisticated utilization methodologies being used by health planning agencies. A particularly good one is that developed by the North Central Georgia HSA, Atlanta, Georgia, that is computer-based and focused around hospital market shares predicated on patient origin data.

as guidelines and criteria for Certificate of Need (CoN) reviews and other plan development and implementation activities.

Recognition of the importance of coordination between health and mental health planning has led to specific funding availability under the ADAMHA Mental Health Block Grant for joint planning efforts. Mental health and substance abuse disorders contribute to almost one-quarter of the current usage of resources in the health care system at the present time. Further, comprehensive and accessible mental health and substance abuse services led to significant reductions in health care costs. In addition, the demand for mental health and substance abuse services is increasing according to data from CoN analysts.

Given the mandate of health planners to plan for services that are accessible, available, high quality, and cost-effective, mental health services must become a higher priority in the health planning area. Data, trends, and costs argue that mental health services can no longer be ignored or viewed as simple categorical programs by health planning agencies.

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APPENDIX I

Psychiatric Bed Need Standards

State	Present Need Standard	Past Need Standard
AL	None	None
AK	None	None
AZ	Utilization	Utilization
AR	.4 beds/1,000	.4 beds/1,000
CA	Utilization	Utilization
CO	Utilization	None
CT	None	.5 beds/1,000
DC	Utilization	None
DE	.14 beds/1,000	None
FL	.35 beds/1,000	None
GA	None	1 bed/1,000
HA	Utilization	Utilization
ID	.15 beds/1,000	None
IL	Utilization	Utilization
IN	.2 beds/1,000	None
IA	None	None
KS	.6 beds/1,000	None
KY	.4 beds/1,000	None
LA	.24 beds/1,000	None
ME	Utilization	Utilization
MD	Utilization & social indicators	Utilization
MA	.44 beds/1,000+ social indicators	None
MI	Qualitative: 50% new beds for poor	None
MN	None	None
MS	Utilization	None
MO	.15 to .4 beds/1,000	None
MT	Utilization	Utilization
NE	90 days/1,000	90 days/1,000
NV	.3 beds/1,000	.3 beds/1,000
NH	.15 beds/1,000	None
NJ	Utilization & social indicators	None
NM	.5 beds/1,000	None
NY	Utilization	Utilization
NC	Utilization	Utilization
ND	None	None
OH	None	None
OK	.39 beds/1,000	None
OR	.4 beds/1,000	.2 to .4 beds/1,000
PA	None	None
RI	95 days/1,000	None
SC	Utilization	Utilization
SD	None	None
TN	.05 to .45 beds/1,000	None
TX	None	None
UT	Utilization	None
VT	None	None
VA	Utilization	None
WA	Utilization	None
WV	None	None
WI	Utilization	None
WY	.15 beds/1,000	None

SOURCE: Eric Caplovud and Melinda Guillemette, "Planning Acute Psychiatric Services: A Survey of Current Practices," 1983.

APPENDIX II

SURVEY OF PSYCHIATRIC BED NEED METHODOLOGIES

June, 1983

NORTH CENTRAL GEORGIA HEALTH SYSTEMS AGENCY

AND

STATE HEALTH PLANNING AND DEVELOPMENT AGENCY

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Introduction to

Survey of Psychiatric Bed Need Methodologies

This survey examines the methods which are used within eighteen national, state, and local planning agencies for estimating the appropriate number of psychiatric beds needed within geographic areas. The listing focuses on the strictly quantitative components of the methodology: methods for computing beds, techniques for forecasting beds available in the future, and standards and adjustment procedures to use for estimating areawide bed needs. The information can be used for a comparative analysis between Georgia's State and local planning agency psychiatric bed need methodologies and other national, state and local approaches. Ideas may be made on how our present techniques can be improved or made more comprehensive to account for varying conditions.

Four major generic approaches for determining bed need are classified: (1) the Community Survey, (2) the Utilization-based including the statistical distribution method; (3) the Social Indicator, and (4) the Fixed Bed Ratio. While these planning methods originated from a general "needs assessment" approach, they have been applied to psychiatric bed planning.

The Community Survey Methodology measures need on the basis of a variety of community assessments, whether being a clinical assessment, use of expert opinion, public forum, or other population survey. The major advantages of this technique are that it can provide up-to-date data designed to address specific planning questions and can glean insights about the delivery system from direct consumers. The key informant community survey approach is relatively inexpensive and can be completed fairly quickly. Major disadvantages of the broad-based field survey are the considerable costs involved and the time and complexities in implementing a sound survey design. Although the key informant approach is inexpensive, there is often a built-in-bias towards prevailing treatment methods and resources.

The Utilization-based Formula, the most prevalent one used, projects bed need on the basis of an analysis of the current demand or utilization of the service. The major objection to this method relates to the basic assumption that past demand can be a predictor for future need. The first issue is that utilization methods are "demand-based" planning, and as such, are insensitive to need-based projections. The concern is that the method does not account for patients in need of care who are currently not seeking help. The second issue is whether current utilization figures have relevance in projecting future mental health service delivery patterns, given the changing nature and philosophy of treatment. The major advantages of this approach is that the methodology is well developed in general health planning and in most areas the data are available. To compensate for this problem, utilization-based planning can be supplemented by either the review of the findings by expert panels, or the recognition that utilization data is most useful in predicting ranges rather than specific numbers of beds.

The Statistical Distribution Methods are based on probability theory and assumptions concerning the patient arrival and discharge process of an individual hospital. They examine the pattern of fluctuation in the use of hospital services and prescribe bed requirements based on a predicted probability that the census will reach or exceed a given level. The objective of statistical methods is to determine a minimum number of beds needed to alleviate problems of high occupancy and long waits without creating bed capacity that will not be used if usual demand patterns are maintained. This method has been used primarily for institutional planning, and thus there are difficulties in adapting them for regional

planning covering several hospitals. It should be noted that all statistical distribution methods are demand-based. The major characteristic that distinguishes this method from a utilization type of approach is its concern with the adequacy of the bed supply to meet a varying demand for patient care.

The Social Indicator Approach uses socio-demographic characteristics of the target population correlated to need for mental health services. It is based on predicting the at-risk population within an area, rather than addressing service needs. Since the relationship between being at-risk and the level and types of service eventually used is not clear or well researched, it is not considered an accurate measure for bed need.

The Fixed Bed Ratio uses a bed per population standard applied to population figures to arrive at needed beds usually stated as a bed per 1,000 population ratio. The most obvious problem lies in the fact that there is no widely accepted standard for bed per population which is appropriate. Further, there are problems in the underlying assumption that the utilization of services will change in direct relationship to changes in population. Variations in treatment modalities or new service alternatives are not considered. The advantage of a fixed ratio approach is the simplicity of the methodology.

Characteristics addressed in the table are the type and scope of the methodology presented based on the four generic approaches discussed above, and to whom the population is applied, (age or disability group). A listing of the formula and the adjustment factors used to account for local conditions or concerns and a brief notation of the staff's impression of the methodology are also included.

The sampling of methodologies offered clearly displays the variety of formulas which have been devised for calculating the number of psychiatric beds "needed" by a given area; each formula represents assumptions, standards and calculation procedures that represent one way of estimating needs. No one formula has received universal approval as the best way to estimate beds nor has there been one ideal standard for judging adequacy of bed supply, although the ratio of number of beds to the number of people in an area is often used in regulatory language at the national and state levels. It was noted in a number of the references studied, that because of the difficulties in quantifying psychiatric bed need that over emphasis should not be given to the bed need projection. The formula should be flexible, allowing for exceptions and considered only one estimate of need in a range of service alternatives.

SURVEY OF PSYCHIATRIC BED NEED METHODOLOGIES

NATIONAL SOURCES

SOURCE	TYPE/SCOPE	FORMULA	ADJUSTMENT FACTORS	COMMENTS
Health Resources Administration/ National Institute of Mental Health Group on Psychiatric Bed Need U.S. Department of HEW Washington, D.C.	Fixed ratio combined with a recommended occupancy rate.	**Potential Range** Potential range of between .15 and .40 non-federal, short-stay hospital beds used for psychiatric patients for each 1,000 persons. **Coverage** All licensed beds in which the ALOS is less than 30 days. Includes all short-stay psychiatric beds in psychiatric and general hospitals, and all other short-stay specialized beds which are used for psychiatric care. Included are all beds used for psychiatric inpatient episodes, whether or not they are in designated psychiatric units, such as medical/surgical beds used for psychiatric cases. Alcohol and drug beds are not included. However, because alcohol and drug programs influence the demand for acute psychiatric care, and because alcohol and drug patients have special needs, this issue deserves further study. **Occupancy Rate** An occupancy rate of at least 80 percent is recommended. However, because the length of stay for those under 18 year of age is 25 to 50% higher than for adults, the occupancy rate for children should be lower. (July, 1980)	The discussion on the standards notes that certain factors affect the point in the range for a particular area or state: 1) Availability of alternative services such as long-term care, community residential services; 2) Patient origin of larger facilities which serve patients living outside the immediate area; and 3) Make up of the target population, e.g., aged, children, poor.	These are draft standards developed by the Work Group for the National Guidelines for Health Planning. Officially, they were never approved; however, they were recommended to states and HSAs as a guide.
The National Guidelines for Health Planning U.S. Department of Health Education and Welfare Washington, D.C.	Fixed ratio applied to general hospital beds which include psychiatric beds.	less than 4 non-federal, Short-stay hospital beds per 1,000 population. All short-stay non-federal hospital beds are included, such as general medical/surgical, childrens, obstetric, psychiatric, and other short-stay specialized beds. Short-stay beds are those in which the average LOS is less than 30 days.	Age. Greater than 12% of the population must be 65 years of age or older. Seasonal population fluctuation. Rural areas. Hospital care should be accessible in a	4 beds per 1,000 population is a ceiling, not an ideal situation for all areas. HSAs are urged to attempt to decrease ratios to below 3.7.

SURVEY OF PSYCHIATRIC BED NEED METHODOLOGIES

NATIONAL SOURCES

SOURCE	TYPE/SCOPE	FORMULA	ADJUSTMENT FACTORS	COMMENTS
The National Guidelines for Health Planning (Cont'd)		Licensed beds should be used in calculations.	reasonable period of time (30 min. travel time for majority of patients). Urban areas. Large numbers of beds in one part of an SMSA may be compensated for by fewer beds in other parts of the SMSA. There should be a joint plan among the HSAs serving the SMSA which provides for less than 4.0 beds/1,000. Referral hospitals. For referral hospitals providing a substantial portion of specialty services to those outside the area, the HSA may exclude the beds used by patients from outside both the HSA and SMSA area.	Areas with Federal medical facilities and HMOs should be able to achieve lower rates. Population growth alone may bring the area below the target.
		HMO average annual occupancy rate for medically necessary procedures. (March, 1978)	Seasonal population fluctuations. Rural areas. In rural areas with significant numbers of small hospitals (less than 4,000 admissions) rates of less than 80% may be justified.	To be applied on an areawide rather than institution-specific basis. Increases in occupancy rates should result from decreases in bed supply rather than increases in utilization.

SURVEY OF PSYCHIATRIC BED NEED METHODOLOGIES

NATIONAL SOURCES

SOURCE	TYPE/SCOPE	FORMULA	ADJUSTMENT FACTORS	COMMENTS
National Psychiatric Institutes Washington, D.C.	Utilization-based prevalence estimate using national data and percent needing hospital acute care by diagnosis, age 0-17.	Estimate of prevalence developed by the Graduate Medical Education National Advisory Committee (GMENAC), Child Psychiatry subcommittee based on specific diagnostic categories used in following formula: $\frac{\text{Population in Need of Inpatient Care (GMENAC estimates)} \times \text{ALOS}}{365 \text{ days}}$ Desired Occupancy = Beds needed (90%) The target population base planned for use 1985 projections of youth 15-19. ALOS was set at 45 days and desired occupancy at 90%. (Standards for Psychiatric Facilities Serving Children and Adolescents, 1971).	None	Based on several inexact assumptions about ALOS and occupancy. Doesn't differentiate ALOS by differing age groups.

SURVEY OF PSYCHIATRIC BED NEED METHODOLOGIES

STATE SOURCES

SOURCE	TYPE/SCOPE	FORMULA	ADJUSTMENT FACTORS	COMMENTS
New Mexico State Health Planning and Development Agency Albuquerque, N.M.	Utilization based.	Multiply the projected population (in 10,000s) by discharges per 10,000 of the same population and multiply by the average length of stay (ALOS) to compute patient days. Patient days divided by 365 days will compute the average daily census (ADC. ADC ÷ desired occupancy results in total bed needs for specified populations. Subtract all currently existing beds to determine beds actually needed. ALOS was approximately 54 days for adolescents; and the desired occupancy rate was 85% (New Mexico CMH Guideline recommendations).	None.	Arbitrary assumptions about ALOS and occupancy are made. Based on national data estimates.
State of North Carolina Raleigh, N.C.	Utilization based formula for determining psychiatric bed needs for all age groups including adolescent and geriatric.	Projected bed need is determined by computing discharge rates per 10,000 population ages 0-17, 18-64 and 65+ for total discharges from state mental institutions and freestanding psychiatric hospitals. The discharge rates multiplied by projected age specific population and appropriate length of stay for each age group (45 days for 0-17, 30 days for 18-64, 60 days for 65 and older;) and 12-15 days for patients treated in acute general hospitals yield projected patient days. Discharge rates are then calculated for total age specific discharges (with principal diagnosis of mental illness) from general acute care hospitals with designated psychiatric units and from hospitals reporting psychiatric discharges with no designated units. These discharge rates multiplied by projected age specific population and actual length of stay for each age group yield projected patient days. Projected patient days (all age groups, all settings) are then summed, divided by 365 (days in year) to arrive at an average daily census which is then divided by an appropriate occupancy factor (85%) to arrive at projected bed need. Existing inventory plus any approved beds not yet in operation are subtracted from projected bed need to determine unmet need or excess capacity. The methodology is applied to beds in free-standing psychiatric hospitals and general acute hospitals with defined psychiatric units. (1982 State Health Plan)	Specific adjustments allowed for special local circumstances.	Excludes specific bed planning for Alcohol and Drug Abuse beds.

SURVEY OF PSYCHIATRIC BED NEED METHODOLOGIES

STATE SOURCES

SOURCE	TYPE/SCOPE	FORMULA	ADJUSTMENT FACTORS	COMMENTS
South Carolina State Health Planning and Development Agency Columbia, S.C.	Utilization based formula for Child and Adolescent, ages 0-18 inpatient beds needed.	A use rate of 22.09 was derived by dividing the patient days for the 0-18 years population from HSA IV (use rate is extrapolated from current utilization rate of the discreet unit providing child and adolescent services in the state located in HSA IV) by the total population of 0-18 years for HSA IV. Then this usage rate, 22.09 was applied to the population 0-18 in each of the other HSAs. An 80% planning factor was used to establish bed needs at each HSA level. (Amendment to the 1981 S.C. State Health Plan).	None.	The model uses one existing unit to derive the use rate, making the assumption that all units operate and attract clients in a similar manner to that one. It also assumes that all geographic areas have the same complement of mental health services as the sample area. If either assumption is faulty, then the results will be inaccurate. Positively allows for augmented estimate of beds based on underestimated needs in past.
State of Tennessee Health Planning Authority Nashville, Tennessee	Social Indicator and Fixed Bed ratio for assessing acute psychiatric bed need.	The NIMH Mental Health Demographic Profile methodology is applied by county to rank the 108 planning region counties by need. The county ranks are then arranged according to the NIMH generic level-of-need groupings. Bed need ratios are then assigned to the groupings based on alternate scales (National guidelines for bed need of .15 to .40 range; Tennessee range also offered adjusting it upwards as county ranks in Tennessee were below national rank. The county ratios are then aggregated to an overall HSA ratio. (Tennessee State Health Plan 1982-1986.)	None.	Based on a population-based need formula can assess actual need not present utilization only. The major disadvantage is that it is based on 1970 census data and formula is based on presumptions of social indicators and relationship to mental illness. Shows only relative need.

SURVEY OF PSYCHIATRIC BED NEED METHODOLOGIES

HSA SOURCES

SOURCE	TYPE/SCOPE	FORMULA	ADJUSTMENT FACTORS	COMMENTS
Appalachian Georgia Health Systems Agency Cartersville, Ga.	Utilization based method for general hospital beds which includes a separate calculation for beds in psychiatric units.	**Hospital Bed Need** The Agency uses the Population Service Area Ratio Formula to calculate hospital bed need in the AG-HSA. Population-Service Area Ratio Formula - Admission rate of area X population of service area X ALOS / 365 days X accepted occupancy rate Where . Admission rate of area is historic . ALOS is the historic average length of stay . Accepted occupancy rate may vary from 70% to 90% depending upon the type of service (medical/surgical, pediatric, etc.) being considered. Data from the 1979 Georgia Hospital Utilization Study was used to calculate the admission rate and average length of stay (ALOS) employed in the Population-Service Area Ratio formula. The following occupancy rates were used in the formula: 1) 85% for medical and surgical beds, 2) 60% for pediatric beds, 3) 65% for obstetrical beds, and 4) 70% for psychiatric/detox beds. The populations used in the formula were estimates and projections developed by the Georgia Office of Planning and Budget. **Hospital Service Areas** The results obtained through the application of the Population-Service Area Ratio Formula have been applied on a service area basis. Each service-specific trade area (e.g., obstetrical, psychiatric) is based on data generated by the 1979 Georgia Hospital Utilization Study, and represents the destination(s) of patients hospitalized for each service in 1979. The majority of people who live within a given service area are hospitalized most of the time within that area for the service (medical, pediatric, etc.) under consideration. (January, 1982)	None.	None.

SURVEY OF PSYCHIATRIC BED NEED METHODOLOGIES

HSA SOURCES

SOURCE	TYPE/SCOPE	FORMULA	ADJUSTMENT FACTORS	COMMENTS
Central Maryland Health Systems Agency, Inc. Baltimore, Maryland	Utilization-based applied formula for general hospitals acute inpatient psychiatric care for two age groups (15-64) and (65+) Private psychiatric hospitals and State hospitals are considered seperately since LOS is variable.	$\frac{\text{(Projected Patient days)}}{365 \times .85} \cdot \text{(Beds by hospital)} = \frac{\text{(Standard} \times 365)}{\text{(Occupancy by hospital)}}$ • Beds in each hospital = numbers of beds required in target year. (Proposed Guidelines, October, 1981).	1. Occupancy requirements vary, based on size of unit, as follows: Acute Psychiatric Beds Under 20 beds 80% occupancy 20 - 49 beds 85% occupancy 50 + beds 90% occupancy non designated beds 85%. 2. A decrease in community (acute) bed use may be projected based on Medicaid reimbursements limits. 3. Future changes in use rate may be made based on the following change factors: . Change in reimbursement . Change in utilization due to development of alternative treatment programs . Change in utilization due to change in involuntary admissions policies of general hospitals.	Limited to general hospital acute inpatient psychiatric care and not defined by major disability groups.

SURVEY OF PSYCHIATRIC BED NEED METHODOLOGIES

HSA SOURCES

SOURCE	TYPE/SCOPE	FORMULA	ADJUSTMENT FACTORS	COMMENTS
East Central Georgia Health Systems Agy. Inc. Augusta, Georgia	Utilization based method applying a standard occupancy rate within a designated service area; includes both general psychiatric and substance abuse beds.	Inpatient hospital psychiatric services, including those in freestanding private and state facilities and those in psychiatric units of general hospitals (for treatment both general psychiatric and substance abuse problems), not increased unless all facilities within a travel time of 60 minutes are operating at an annual 80 percent bed occupancy rate (Based on the facility's surveyed psychiatric bed capacity). Construction of new psychiatric beds or a new facility in a general hospital must also conform to the ECGHSA's General Bed Need Methodology. Other factors considered include feasibility of converting existing facilities; evidence that expansion/construction is most effective that billing practices and fees consider client populations' ability to pay. (1983)	None.	None.
Finger Lakes Health Systems Agency Rochester, New York	Community Survey methodology for estimating the need for inpatient psychiatric care and appropriate alternative services for adults. Estimates are made for psychiatric and alcoholism level of care needs.	Clinical assessment methodology developed and tested for estimating inpatient psychiatric care and alternative services in seven service areas: 1. Psychiatric units of general hospitals. 2. Alcoholism Rehabilitation units of general hospitals. 3. Federal and State hospitals. 4. CMHC partial hospitalization programs. 5. Federal and State Partial Hospitalization programs. 6. Community Residences. 7. Community-at-Large clinical survey teams surveyed sample population of 2057 in seven service settings and used point estimate of needs found in survey to estimate needs for total risk group. The number of residential beds needed are then estimated by allowing for appropriate occupancy rates: 90% acute psychiatric inpatient care 95% long-term inpatient care 95% non-medical residences (1978)	Included in basic formula.	This technique is very costly and in this case was funded under contract with DMH. It offers a point in time estimate only of current service needs with no allowance for persons in levels of care inappropriate to their treatment needs. Offers specific estimates of need for a spectrum of care based on a comprehensive clinical survey.

SURVEY OF PSYCHIATRIC BED NEED METHODOLOGIES

HSA SOURCES

SOURCE	TYPE/SCOPE	FORMULA	ADJUSTMENT FACTORS	COMMENTS
North Central Georgia Health Systems Agency Atlanta, Georgia	Utilization Based formula projecting total psychiatric beds by facility and county.	Total 1983 annual psychiatric inpatient discharges by facility and county ÷ Current population for hospital impact "zipcode" area and county = current annual discharge rate for facility and county X Projected hospital impact "zipcode area and county populations = projected annual discharges X three-year ALOS (Average length of Stay) average = Projected patient days ÷ 365 and Occupancy Standard of 85% = total number of projected psychiatric beds needed by facility. (1983)	Included in basic formula.	Bed projections are not defined by major disability area needs and are applied to freestanding inpatient psychiatric beds only.
Southwest Georgia Health Systems Agency Albany, Georgia	Statistical distribution (Hornello) method; general psychiatric short stay beds only.	The methodology to project future short-stay psychiatric bed need in Southwest Georgia consists of three major parts: (1) A 1985 projection of hospital inpatient days for each county's residents in Southwest Georgia. (2) An adjustment to those projections to reflect the travel patterns and net flow of patients between counties, and; (3) The determination of beds needed to accommodate the projected average census for each hospital and seasonal variations in that census. 1. The method used to project future hospital patient days is population-based. It begins with standards for hospital utilization by age groups derived from the total areawide and statewide experience during the 1977 Georgia Hospital Patient Origin Study. SHORT-STAY PSYCHIATRIC BEDS Age Group — Standard — Patient Origin Results All Ages — 160 — SWGA = 160.8, Georgia = 182.8	None.	None.

SURVEY OF PSYCHIATRIC BED NEED METHODOLOGIES

HSA SOURCES

SOURCE	TYPE/SCOPE	FORMULA	ADJUSTMENT FACTORS	COMMENTS
Southwest Georgia HSA Albany, Ga. (continued)		The standard was applied to the 1985 population projections prepared by the State Office of Planning and Budget. 2. Because the facilities under analysis are within four mental health catchment areas and serve primarily the residents of these areas, the 1977 Patient Origin Study was utilized to project inpatient days per catchment area. 3. Dividing the annual totals by 365 results in the average daily census projected for each hospital in 1985. A linear regression method was utilized to predict peak census. The total adjusted average daily census (ADC) was inserted into the following formula to arrive at the total adjusted psychiatric bed need for 1985 for each facility: (1.981 - 0.157 log ADC) X ADC. October, 1981)	None.	None.
Southern Piedmont Health Systems Agency Charlotte, North Carolina	Utilization-based methodology to project the short stay bed needs for psychiatric, alcohol and drug abuse patients for three age groups: 0-14, 15-64, 65+	Step 1: Determine the origin of patients receiving treatment at HSA III hospitals which provide psychiatric or alcohol treatment services. Step 2: Obtain acute care psychiatric unit and freestanding hospital discharge data for three age groups 0-14; 15-64; 65+. Step 3: Adjust psychiatric discharge data to obtain discharges for HSA III patients seeking care at licensed psychiatric and alcohol treatment care facilities.	Included in basic methodology	

HSA SOURCES

SOURCE	TYPE/SCOPE	FORMULA	ADJUSTMENT FACTORS	COMMENTS
Southern Piedmont HSA Charlotte, N.C.		Step 4: Calculate the HSA III discharge rate per 1,000 population by age groups by the 1970 age group populations. The results are the discharge rates per 1,000 population by age groups. Step 5: Project 1985 HSA III discharges by age groups by multiplying the age adjusted discharge rate by the 1985 projected population. Step 6: The average length-of-stay is computed by dividing the 1970 psychiatric and alcohol treatment days of care by the 1970 discharges by age groups. Step 7: The total days of care required is adjusted by dividing it by the number of non HSA patients entering area for total days required. Step 8: The average daily census is then calculated by dividing total patient days by 365. Step 9: The projected year average daily census (ADC) is then adjusted by an optimal occupancy rate to determine the number of beds needed to handle expected utilization. The ADC divided by .80 equals the projected bed need for 1985. (Southern Piedmont HSA Health Systems Plan for 1980-1985).		

SURVEY OF PSYCHIATRIC BED NEED METHODOLOGIES

HSA SOURCES

SOURCE	TYPE/SCOPE	FORMULA	ADJUSTMENT FACTORS	COMMENTS
HSA of Southwestern Pennsylvania Pittsburgh, PA.	Utilization-based and fixed bed ratio applied in separate formulas for (1) adult short-term inpatient psychiatric services and (2) short-term inpatient psychiatric services for children and adolescents (children aged 0-12; adolescents aged 13-17).	**Adult Formula:** Adult acute inpatient psychiatric beds needed = $\frac{\text{Adult discharge rate per 100,500 for psychiatric diagnosis} \times \text{Adult Population Projection (in 100,000's)} \times \text{Length of Stay (LOS)} \times 0.8}{365 \text{ (Days in year)} \times 80\% \text{ (occupancy goal)}}$ **Children and Adolescents Formula:** $\frac{\text{Rate per 100,000 Pop. Needing Inpatient Care} \times \text{Adolescent Population in (100,000)} \times \text{ALOS}}{292 \text{ (365 days} \times 80\% \text{ occupancy)}}$ = Adolescent acute inpatient psychiatric beds needed (Prevalence rates are based on Graduate Medical Education National Advisory Committee. GMENAC report of projected prevalence rates for children and adolescents). The formula is not directly applied to children but is based on prevalence rates applied to adolescents adjusted by ratio factor of actual patient days used by children to days used by adolescents. (Adopted Guideline July, 1981).	An adjustment factor of .8, based on actual experience is applied to account for the percent of primary psychiatric patient days not occurring in a designated psychiatric unit.	Bed projections are limited to adult and children and adolescent categories.

SURVEY OF PSYCHIATRIC BED NEED METHODOLOGIES

HSA SOURCES

SOURCE	TYPE/SCOPE	FORMULA	ADJUSTMENT FACTORS	COMMENTS
Three Rivers Health Systems Agency, Columbia, South Carolina	Utilization-based formula for short-stay psychiatric services for three age cohorts, 0-14; 15-64; and 65+. A dual approach for bed need is used for the public and private delivery system. The public planning approach uses the mental health catchment area and the SMSA as the service area for private sector beds. The HSA area is used for children/adolescent planning.	Current patient's days by age cohort * Current population by age cohort Current use rates by age cohort X 1985 projected population by age cohort * Projected use rates by age cohort * 365 days Projected age-cohorted Average Daily Census. Average Daily Census * 85% desired occupancy Projected bed need. (Adopted February, 1981)	Adjustments are made for beds required by the State Department of Mental Health to perform court-ordered screenings.	Alcohol and Drug Abuse bed planning is not included separately.

SURVEY OF PSYCHIATRIC BED NEED METHODOLOGIES

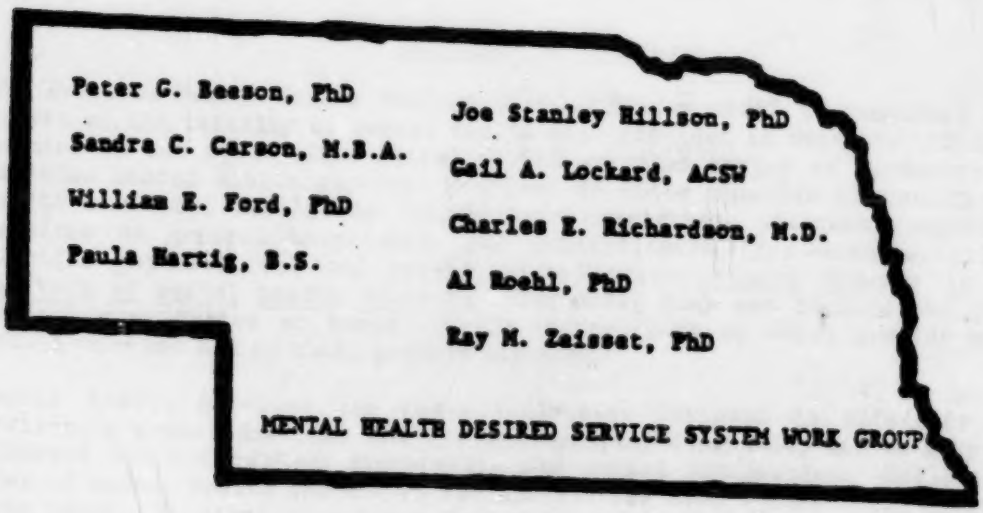
HSA SOURCES

SOURCE	TYPE/SCOPE	FORMULA	ADJUSTMENT FACTORS	COMMENTS
West Michigan Health Systems Agency Grand Rapids, MI	Community survey method, utilization techniques and fixed bed ratios addressing adult beds.	A range of future bed need is made based on a formula containing the following variables and assumptions. 1. Patient origin 2. Actual patient days of psychiatric care given by facilities individual sorted by private, public, defined psychiatric unit and undefined ones. 3. Rates per 1,000 population for use rate arriving at a 90.0 standard, which is the average for counties with a unit. 4. Areawide and local county pictures of patient days of care based upon percentage utilization. 5. Using the total number of base year patient days of care, 1985 estimated area population figures and an 85% occupancy rate, a bed need figure is made. (A study of the Psychiatric Bed Need in the WMHSA Area, May 18, 1981.)	A potential impact ratio for chronic long term patients released from the state institutions based on deinstitutionalization emphasis	Formula presented in well reasoned context that "true" picture of bed need is clouded. Numerical bed need is given a range of possible figures based on assumption used.

APPENDIX III

THE NEBRASKA MENTAL HEALTH DESIRED SERVICE SYSTEM
A MODEL FOR THE SPECIALITY MENTAL HEALTH SERVICES SECTOR

Peter G. Beeson, PhD
and
William E. Ford, PhD


Peter G. Beeson, PhD
Sandra C. Carson, M.B.A.
William E. Ford, PhD
Paula Hartig, B.S.
Joe Stanley Hillson, PhD
Gail A. Lockard, ACSW
Charles E. Richardson, M.D.
Al Roehl, PhD
Ray M. Zeisset, PhD
MENTAL HEALTH DESIRED SERVICE SYSTEM WORK GROUP

Nebraska Department of Public Institutions
P.O. Box 94728
Lincoln, Nebraska 68509
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Introduction

Mental health care in Nebraska is characterized as having many providers, public and private; multiple sources of funding; numerous regulatory and planning agencies; and many persons concerned about the mental health of Nebraskans. With so many providers and different kinds of service it has become increasingly difficult to establish priorities, insure continuity of care, and coordinate activity. There is a need for common service definitions and an integrated framework which would facilitate comprehensive planning. The Nebraska Mental Health Desired Services (DSS) model is one step toward the kind of conceptual framework needed to effectively plan and coordinate mental health care in Nebraska. It can be used to provide: (1) a sense of direction around which plans may be developed, policies formulated, and programs organized; (2) a context within which to examine issues in mental health care and make informed decisions; and (3) a framework for discussion and cooperation among the various providers of mental health care.[1]

The model was developed by a group of mental health professionals under the sponsorship of the Nebraska Department of Public Institutions (DPI). This group consisted of DPI staff and representatives from regional centers, community mental health centers, and the private sector. The group worked for over 2 years and utilized their collective experience, relevant research, service utilization information, epidemiologic data, and extensive input from mental health providers, consumer, and advocacy groups and individuals in developing and refining the model. For a discussion of model development, see Appendix A.

The Scope of the Model

The Nebraska Mental Health Desired Service System model is concerned with a subset of the totality of mental health care provided in Nebraska. This model focuses on the specialized mental health services sector or "industry," and includes mental health services provided by those agencies (community mental health centers), facilities (psychiatric hospitals), programs (psychiatric services of general hospitals), and practitioners (for example, private practice psychiatrists and psychologists) whose primary mission is the delivery of mental health services. The model does not include the general medical care sector or human service sector, both of which provide mental health care but not as their primary mission.

Mental health services are those activities designed to eliminate, or ameliorate mental disorder and its accompanying disability and to help those affected achieve maximum functioning and social integration. Defining the area of mental health and all it encompasses has been a continuing debate for many years. To simplify matters this model primarily addresses those problems covered in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders Third Edition (1980), with exceptions of mental retardation and substance abuse disorders.

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[1] For a more complete discussion of the DSS concept and its use, see Beeson and Ford (1983).

Mental retardation and substance abuse (alcoholism and drug abuse) disorders are excluded from the model because of well developed specialized service industries associated with those problems. The planning for these service industries are respectively the responsibility of the Office of Mental Retardation and the Division on Alcoholism and Drug Abuse of the Nebraska Department of Public Institutions.

The DSS model includes only direct care services. There are indirect types of services (e.g., prevention and education) which are important but not part of this model. The DSS model does not include a number of activities (e.g., case management, case consultation, case finding, intake and referral, etc.) which are sometimes called services but which are more appropriately considered service or program characteristics. The model assumes that program characteristics are part of what it takes to run any quality mental health program and as such are the province of quality assurance standards (cf. Joint Commission on the Accreditation of Hospitals, 1976).

With the expection of a few age specific service categories the DSS model does not address special populations. While it is important to recognize that there may be a need to target certain groups, either because they are underserved or unserved or because they have special service needs, these are not considered services per se. In other words, how one structures particular programs is relevant to special populations (elderly, women, minorities, poor, etc.), but that structure is not relevant to the abstract categories of specialized mental health services. An outpatient hour is an outpatient hour whether it is part of a childrens', elderly, womens', Chicano, Native American, Black, rural, or poverty program.

Finally the model covers all providers of service within the speciality mental health service sector. Past planning efforts have tended to focus only on those services funded by the DPI. Such an approach tends to further fragment the system and decrease the possibility of effective coordination and comprehensive planning.

In sum, the DSS has as its focus all (public and private) direct care services (excludes consultation, education, and prevention) of the speciality mental health (excludes alcoholism, drug abuse, and mental retardation services) services sector (excludes general health and human services sectors) and is not directly concerned with program characteristics (e.g., case management) or special populations (e.g., women, minorities, the poor). This model assumes that it is both important and logical to understand the specialty mental health services sector as a separate system. It is, however, equally important to remember that this does not cover the entirety of mental health care and that a truly comprehensive understanding of mental health services cannot be achieved solely through the use of this model and must include other service systems such as the general health care, alcoholism, drug abuse, mental retardation, education, etc.

The Structure of the Model

The basic elements of the DSS model are service categories (see Table 1). As categories they represent groupings or headings of services and should not be confused with programs, facilities, or agencies. For each service category, there is a general definition, an estimated need, a note on persons to be served, and assumptions/qualifications (see Appendix B).

Unless otherwise specified, service categories include services to persons of all ages. This might work in two different ways: services may not be differentiated by age; or since these are categories of service, they might include a number of programs, facilities, or agencies with age specific services whose resources when added together form a general category of services.

Nebraska is divided into six mental health regions (see Figure 1). The first level of the model contains service categories for regional level services. Regional level services are designed to create a comprehensive specialized mental health system for each region. In other words, each region would contain a complete continuum of diagnostic-treatment services (emergency, outpatient, short-term inpatient, transitional, and intermediate treatment) and an array of supportive-maintenance services (community living services, supportive/ sheltered employment, residential alternatives, and structured/supportive long-term residential).

In general, persons would enter the system either through emergency or outpatient services. Short-term inpatient services are hospital based intensive treatment environments designed for brief stays. Both transitional and intermediate treatment are viewed as less restrictive alternatives to inpatient treatment and can be used as both a preventive to inpatient and as a stepping stone from inpatient to more independent living. Transitional (e.g., halfway house) services are residential programs of short duration with a strong treatment focus. Intermediate has been called partial-hospitalization, or day treatment and includes those services which involve larger blocks of time than outpatient, are a structured group oriented treatment setting and are not residential in nature. Supportive-maintenance services contain one very structured environment (structured/supportive long-term residential) designed primarily for persons now in state hospitals who cannot live in less restrictive community alternatives but who are not appropriate for the hospital level treatment settings and for those persons who are candidates for nursing care but whose behavior is such that the normal nursing have cannot cope with them. The other supportive-maintenance services are designed primarily for the chronically mentally ill and include community living services (day care), supportive/sheltered employment (e.g., workshops, transitional employment, work stations, and volunteer work) and residential alternatives (e.g., group homes, supervised apartments, cooperative homes, foster care and adult family homes). In sum, the focus is on a balanced array of services, which provides a continuum of care at the regional level, allowing the vast majority of persons experiencing mental health problems and disability to receive support and treatment close to their work, home and family.

For those difficult problems which have a relatively low prevalence and require specialized services, two sets of services are specified which cut across regions. First, there are three of these services in which the need is great enough to warrant more than one location in the state and are referred to as multi-regional services (Specialized Children's Residential, Specialized Adolescent Residential, and Extended Inpatient). Theoretically, services within these categories would be present in two to five regions within the state with some serving more than one region. Both the children's and adolescent residential categories represent a recognition that in some cases it may be most beneficial to treat children and youth in a structured living environment outside their home. Services within this category would probably

be group homes but might include a range of foster care options. Extended inpatient includes those hospital based services designed for persons who can benefit from an intensive treatment environment but for who short-term inpatient does not provide the time necessary for amelioration of their problems.

Second are those services which are believed to be needed at only one location in the state. These state level services include Severely Disturbed and Disruptive Children Inpatient, Severely Disturbed and Disruptive Adolescent Inpatient, and Security Inpatient. These service categories are included with the recognition that there are a very small percentage of persons whose behavior is so potentially dangerous and/or destructive that they need a very secure and structured treatment setting. Both the category for services to severely disturbed and disruptive children and the corresponding one for adolescents are very secure and highly structured, hospital based treatment settings for those very few youth who cannot be treated in any of the less restrictive settings. Security inpatient includes those services provided in very secure, hospital based environments for such categories of persons as the criminally insane, mentally disordered sex offenders, and those too dangerous for less restrictive treatment alternatives.

For each service category a level of need estimate* is provided (see Table 1). These need estimates represent both capacity and balance, e.g., the appropriate level and mix of service categories needed to meet the specialized mental health needs of citizens. These estimates allow one to use the model as a yard stick to gauge the degree to which current services approximate the desired state. In other words, while it is important to have all the essential mental health services available in an appropriate distribution (comprehensiveness), it is equally important that these services exist in levels relative to one another (balance) which allows the system to provide an adequate and meaningful continuum of care.

A Final Note

The desired service system is not endowed with elegance and precision simply because elements and modalities are defined or because numbers have been established for the average length of stay or because of some representation of need. In this context, when one says desired it implies what should be. From this position it is something that may not currently exist or may never exist. The desired service system is <u>not</u>, however, an ideal system or a utopian vision. Rather, it is a judgment made as independently as possible from current financial and political realities. It is what mental health professionals, with input from consumers and the general public, consider a comprehensive system of services for the state's specialty mental health service sector. As such, it provides a systematic and integrated focus for growth and change in mental health services.

Because of regional differences, because of vicissitudes of the economy and politics, because of variations in the availability of different types of personnel, uncertainty is built into the employment of any desired system; a system model cannot address the complete reality of actual service delivery.

*For a discussion of the development of need estimates, see Appendix A.

Flexibility is desirable. The desired service system is not a static conception. While it is desirable that such a system retain a certain amount of stability in order that it may provide direction for planning and policy development, it must be responsive to new knowledge, experience and innovation in mental health treatment services. Changes and adjustments will need to be made as further experience and knowledge are gained. Rather than being a rigid mold, a system model should be part of the climate for development which fosters innovation and enables the development of a balance of human services.

While such a conception is not perfect, it is far better than the often vague and unstated assumptions which guide individuals and agencies in the development of mental health services and policies. It provides a common framework within which one can design and develop means with which resources are allocated and needs are met. It forces one to take a system perspective in considering change and intervention. It provides a systematic foundation upon which the many different persons, groups, organizations, and agencies concerned with mental health care can build a comprehensive and balanced service system.

TABLE 1

NEBRASKA MENTAL HEALTH DESIRED SERVICE SYSTEM SUMMARY TABLE*

	Estimated Average Length of Stay	Estimated Need Per Nebraska's 1980 Population*
REGIONAL LEVEL SERVICES		
Emergency	1 episode	60 episodes/day
Outpatient	8 hours	1,500 hrs/day
Short-Term Inpatient	15 days	355 Beds
Transitional	45 days	300 Beds
Intermediate	90 days	450 Slots
Community Living Services	1 year	2,156 Slots
Supportive/Sheltered Employment	18 months	864 Slots
Residential Alternatives	3 years	1,884 Beds
Structured/Supportive Long-Term Residential	5 years	1,500 Beds
MULTI-REGIONAL SERVICES		
Specialized Children's Residential	6 months	30 Beds
Specialized Adolescent Residential	9 months	110 Beds
Extended Inpatient	1 year	160 Beds
STATE LEVEL SERVICES		
Severely Disturbed and Disruptive Children Inpatient	1 year	15 Beds
Severely Disturbed and Disruptive Adolescent Inpatient	2 years	30 Beds
Security Inpatient	3 years	125 Beds

*Nebraska's 1980 population was 1,570,006.

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Appendix A

Model Development

The model was developed under the sponsorship of the Nebraska Department of Public Institutions (DPI), which is Nebraska's mental health authority. The basic approach to model development involved organizing a panel of experts (key informants) and facilitating their development of the model.

1. Key Informant Approach:

   The mental health models currently in use in Nebraska have been borrowed or adopted from elsewhere. In development of the DSS model it was decided that such a model should be developed with local resources and designed to address the unique needs of those Nebraskans with mental health problems.

   While objective/empirical approaches to DSS models have proved useful in Nebraska's Alcoholism planning (see Nebraska Division on Alcoholism Service Development Plan, 1977), this approach was not possible in mental health because of a lack of national data similar to that used in the alcoholism effort. Therefore, the Department of Public Institutions elected to approach the problem of DSS model development by forming a work group. In discussions concerning work group composition it was decided that the difficulty and nature of the initial development of the DSS model required a small group whose members had a certain level of mental health expertise and who shared a common basis of understanding and experience. Given the above assumptions it was decided to form a small work group composed of the Department staff and mental health professionals. The Department took the position that while the group's experience should be representative of the public and private sectors, rural and urban areas, medical and non-medical approaches, and inpatient and outpatient settings; the group should not be designed to be representative of programs, facilities, administrative sub-divisions, disciplines, or treatment ideologies.

   The following criteria for selection of informants were developed:

   a. Each must be knowledgeable about Nebraska's mental health system and the mental health problems of its citizens.

   b. Each must be able to deal with abstract, system-level thinking.

   c. Each must have direct clinical, planning, research, teaching or administrative experience within the Nebraska mental health system.

   d. Each must be able to rise above the parochial interests of programs, geography, discipline, and treatment ideologies.

   e. Each must be in basic agreement with the proposed approach to the desired service system model development.

   f. Each must be willing and able to devote the necessary time and effort to the project.

A proposal setting forth the strategy for development of a desired service system model and the requirements for key informant selection was circulated among DPI staff with a request that they nominate persons. Just over 20 names were suggested by the staff and others.

Three DPI staff members were assigned to the group. The selection process for others involved personal interviews with nominees and a sharing of the DSS model proposal. A total of 11 persons were contacted about their interest in participating in the work group. All those contacted expressed interest in participation, but four individuals felt they could not make the time commitment. The final group was then composed of three D.P.I. staff members and seven others. Once the process got underway, one of the seven mental health professionals had to withdraw because of conflicting work demands. The final group involved nine persons:

DPI staff:

a. William E. Ford, Deputy Director, Department of Public Institutions.

b. Peter G. Beeson, Coordinator for Planning, Department of Public Institutions.

c. Paula Hartig, Research Analyst, Medical Services (Mental Health) Division, Department of Public Institutions.

Mental Health Professionals:

a. Sandra C. Carson, Vice President, Richard Young Hospital, Lutheran Medical Center, Omaha

b. Joe Stanley Hillson, Director, Psychological Services, Norfolk Regional Center, Norfolk

c. Gail A. Lockard, Director, Counseling Services for Older Adults and Consultation and Education Services, Community Mental Health Center of Lancaster County, Lincoln

d. Charles E. Richardson, Clinical Director, Lincoln Regional Center, Lincoln

e. Al Roehl, Director, Region I Mental Health, Alcoholism and Drug Abuse, Scottsbluff

f. Ray H. Zeisset, Director, Psychological Services, Lincoln Regional Center, Lincoln

2. Developmental Process

The Desired Service System work group had its initial meeting on January 19, 1981. This began a schedule of working meetings consisting of one day every other week. Extensive work was done by work group members on their own between meetings. These meetings were held in Lincoln and led by the Coordinator for Planning. The meetings were generally informal and to the extent possible had an emphasis on group consensus. There was

a surprisingly high degree of consensus on most issues; especially after operating assumptions were clarified.

The work was addressed in two stages. The first stage involved determination and description of the service categories of the DSS model. The group decided that, where possible, they would review existing services and their definitions, adopting and modifying rather than inventing. For each service category a definition was created, a description of persons to be served developed, an estimated average length of stay proposed, and any assumptions or qualifications listed (see Appendix B). The initial set of service categories and their definitions were continually refined throughout the process.

The second stage involved estimation of the level of resources needed for each service category. The problem of resources, most commonly discussed in terms of "bed need", has been noticeably lacking in models of mental health care (cf. Elpers and Crowell, 1982). Rather than common unimodal approach to psychiatric bed need (cf. Bacharch, 1975), the group sought to consider the model as a whole, making their estimates based on the assumptions that all services were in place and functioning as intended.

The initial hope was that ratios could be developed among service categories (e.g. for every short-term inpatient bed there would be x transitional beds, y outpatient hours, 2 security inpatient beds, etc.) which would allow estimation of the total model from the determination of need for a single category (cf. Beeson and Ford, 1981). Following this tactic, the first approach assumed that the DSS model was fully operational and that 1,000 cases had been randomly selected from all active cases in the system on a given day. The work group's job then was to assign these cases to service categories in the relative proportions they felt each case would have been, assuming only one service category per case. A second approach assumed that there were 1,000 additions to the DSS model which could enter the system either through the outpatient or emergency categories. The work group established a pattern of flow of these "cases" through the system, indicating how many would be treated, at what points and in what proportion of cases referrals would be made to other services in the system and how many would be discharged over a year's time. The group was not comfortable with either of the above approaches so it was decided to go with a straight estimate of the level of need by population and work back to the idea of ratios. Assuming 1980 population figures, each work group member independently estimated the resources needed for each of the service categories and then a final set of estimates were arrived at through group discussion (see Table 1).

3. Public Review and Input

Over 400 copies of the DSS Model report were provided to and comment on it sought from mental health providers, consumer groups, advisory groups, professional associations, state agencies, and other interested parties. A series of public hearings were held, one in each of the state's six mental health regions. In addition, special meetings were held with the community mental health center directors, regional program administrators, regional center superintendents, the Nebraska Psychiatric Society, the Nebraska Medical Association, the Nebraska Psychological Association, the Nebraska Association of Professional Psychologists, and the Alliance for the Mentally Ill.

Both written and oral comments were received on the proposed DSS model. Public forums and special meetings tended to be discussion focused and generated a great deal of information sharing. The DSS workgroup was represented at all public forums and special meetings. In addition, each work group member was provided summaries of the comments received in these forums and meetings plus copies of all written comments received.

The DSS work group met and reviewed all public input and made a number of editorial and substantive changes in the DSS model report.

4. Refinement

After one year of working with the model the work group was reconvened to make revisions in the document. Work with the model on the State Health Plan, the Mental Health Staffing Study, the Community Support Project pointed to problems in some service categories and one of the basic assumptions.

Initially the hope was that ratios among service categories would be the key to directly linking the model to need assessment data. After some work in this area and more thinking this basic assumption had to be modified. While there is still some utility in considering the relative relationship of service categories one to another, it now appears that the emphasis must be placed upon the estimates of need levels rather than the ratios. The two main service category problem areas were Long Term Residential Services (LTRS) for the mentally ill and community support services. Regarding LTRS, concern was expressed that the model described potential clients as severely impaired but implied that the service could be a nursing home. The group's intent was that this service be a structured and supportive environment which could care for the kind of long term - maintenance - patients currently at regional centers; without the need for a hospital environment but certainly with more structure and specialized staff than the typical nursing homes.

The community support service category was originally placed in the model in order to be responsive to chronically mentally ill persons living in the community. In other words, it was different from other categories of services because it was more of a program than service and more oriented towards a special population as opposed to a system of specialized mental health services. A number of the services (support for significant others, support services, social and emotional support, and adjunctive services) included under this heading seem to be more in the line of program characteristics or service delivery principles rather than the direct service modalities represented by other service categories in the model.

Another issue with the community support services category was confusion as to whether all these services could appropriately be considered specialized mental health services. For example, while the chronically mentally ill need housing, should all of their housing needs (residential alternatives) be provided by the speciality mental health sector?

A further issue was the implicit assumption that this category took care of the needs of the chronically mentally ill - when, in fact, it was obvious that they would be served in a number of other DSS service

categories. Further, there are non-chronically mentally ill persons who need services (e.g., vocational) specified within the community support service category.

In light of the above problems, the Department of Public Institutions suggested the following refinements to the work group:

1. The use of service category ratios be deemphasize and that the use of the model focus on the estimated levels of need.

2. That the definition and examples of Long Term Residential Services for the Mentally Ill be clarified to reflect a structured, support, and maintenance environment and clearly differentiate it from residential alternatives and inpatient services.

3. That the category of community support services be eliminated.

4. That three of the categories (residential alternatives, sheltered/supportive employment, and day care) under community support services be added to regional level services.

5. That the issues other services (vocational, support for significant others, support services, social and emotional support, and adjunctive) address be covered within other service categories or as part of the mental health authority's quality assurance standards.

In one all day session the work group met, agreed to the propcsed refinements, and made the following modifications: (1) renamed LTRS "Structured/Supportive Long Term Residential" and clarified the definition, (2) eliminated the community support services category, adding the categories of residential alternatives, sheltered/supportive employment, and community living services (family day care), and (3) developed definitions and need estimates for these new categories.

No narrative such as the above can do justice to the complex, intense, and extensive process of discussion, debate, and consensus-building that produced the product described in this report. While the DSS work group was small, their input reflected a broad base of agency, organization, and professional affiliations. At every decision point, numerous issues were raised and many avenues explored. The public review process was extremely useful in pointing out areas of confusion, raising issues, and providing suggestions. The group's resolutions of many of these issues are reflected in the basic assumptions of the model and in the model itself. Many unresolved issues remain, however.

Appendix B

DSS SERVICE CATEGORY DESCRIPTIONS

I. The Regional Level

A. Emergency

1. Definition: A planned, 24-hour service providing appropriate treatment or intervention for unexpected situations which are of sufficient gravity as to require immediate attention. The service includes the capacity and responsibility for appropriate referral.

2. Estimated Average Length of Stay: 1 Episode[1]

3. Estimated Need per Nebraska's 1980 population: 60 Episodes/day[2]

4. Persons to be served:[3] Persons encountering an emotional crisis situation who require immediate professional intervention and who may require referral to another service for continued care. The full range of types of mental health problems are served here. For some, information and/or referral is all that is needed. Others are in severe crisis and will need immediate intervention and closely coordinated referral and transfer to another program. The modal patient is acutely psychotic or suicidal.

   Individuals or their relatives may insist on emergency care, and after a brief period of evaluation and management by the emergency team, the matter will be postponed until the next day for regular outpatient services. At other times urgent and intrusive intervention will be required, such as the immediate hospitalization of a disturbed and dangerous person. Evaluations of persons on "police hold" for mental illness would not necessarily be considered an emergency, since these could be scheduled for evaluation during regular outpatient hours.

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[1] These estimates of average length of stay were developed to further clarify the intent of these categories and to help in establishing ratios among categories. They are not intended to be used as standards. Average length of stay is given in terms of calendar days or years which may or may not correspond to treatment days.

[2] Estimates of need assume that other service elements are operating at their specified capacity.

[3] The "Persons to be served" sections gives a general impression of the types of persons who might make use of each service. These descriptions are for illustration only and are not meant to be comprehensive.

5. Assumptions/Qualifications:

a. This service should have the capability of handling violent, aggressive, and suicidal persons.

b. This service should be well integrated with both the other elements of the Desired Service System and community agencies likely to encounter psychiatric emergency (e.g., law enforcement, emergency medical services, hospital emergency rooms, alcoholism/drug abuse detox, correctional facilities, etc.).

c. Most of the time emergency cases will be called to the attention of the mental health system by some other agency, such as a general hospital emergency room or a law enforcement agency. An imminent threat to life or property related to some possible problem of mental illness or the unexpected and sudden onset of severe psychotic symptoms would require the emergency staff to evaluate and make disposition.

B. Outpatient

1. Definition: Services generally provided for less than three hours, on an individual, family or group basis, but not as part of a residential program (independent of a client's involvement with a residential program). Includes preliminary screening, medication maintenance, assessment, treatment, aftercare and outreach.

2. Estimated Average Length of Stay: 8 hours of treatment/90 days on the books

3. Estimated Need per Nebraska's 1980 population: 1,500 hours/day[4]

4. Persons to be served: Individuals with acute or moderate disruption of their lives/mental functioning who are not sufficiently disturbed to require an intensive, structured, protective environment and who are able to maintain their normal level of functioning with brief treatment support. They need professional assistance in assessing the nature of their problems and in determining the changes needed. A wide range of problems are handled, from transient adjustment problems to severe and disabling disorders. Many chronically mentally ill persons can be managed in outpatient treatment, particularly when family and/or other social support is available.

5. Assumptions/Qualifications:

a. A number of outpatients would be seen for only one session. These would include all persons seen only for

[4]This estimate is based on a five day work week and includes the care given by mental health professionals (psychiatrists, psychologists, etc.) in private practice.

evaluation, such as persons referred by a board of mental health for determination of mental illness and dangerousness, persons referred by a court for determination of some legal status in connection with a criminal proceeding, or evaluations for other agencies (such as Social Security), to aid in determination of disability. Included would be persons seen for the intake process followed by a determination of not needing treatment. Frequently persons refuse to return after the initial intake because of the passing of the crisis, the consolidation of other non-mental health resources, dissatisfaction with the services received at intake, or moving out of the area. However, there will also be the occasional, long-term, psychotherapy patient. Chronically mentally ill patients will often remain in treatment for extended periods, with various levels of supportive and therapeutic contact and commonly, with long term medication maintenance.

b. Outpatient services may be delivered in a variety of settings and may involve the mental health professional going to the person in need rather than them always coming to the professional.

c. The mental health professional (psychiatrist, psychologist, etc.) in private practice is an important resource for the provision of outpatient services.

C. Short Term Inpatient

1. Definition: A hospital setting in which the patient is provided a room, board and routine monitoring by staff. Inpatient services are characterized by a structured environment, close supervision, active therapeutic management, and customary use of chemotherapy, and the availability of medical consultation 24 hours per day. The focus of this service is stabilization and rapid return to community living, although referral to other levels of care may be used when appropriate. This service should have the capacity to provide for controlled egress, for patients with impaired judgment, impulse control, or other conditions or circumstances requiring a restrictive setting.

2. Estimated Average Length of Stay: 15 days

3. Estimated need per Nebraska's 1980 population: 355 beds

4. Persons to be served: Severely and acutely mentally disordered individuals often characterized by marked impairment, including violent tendencies and suicidal ideation. Patients will include a number of direct admissions from outside of the mental health system; these will typically be persons who are first identified as significantly disruptive. Diagnostic and problem areas will include the following: suicidal attempts or gestures, acute psychotic episodes, persons referred by their personal physician because of behavioral or emotional problems

of uncertain etiology. Many of the patients will come from other elements of the system because of their inability to get along in less restrictive and less intensive circumstances. Typical examples would be an outpatient who has an exacerbation of psychiatric symptoms during the course of outpatient therapy or a person in the system needing further diagnostic workup or adjustment of medication.

In all events the goal of the short-term inpatient setting will be to transfer to some other element or to effect a discharge as soon as possible and practical. In some instances transfer will be to a more restrictive setting, such as extended inpatient.

5. Assumptions/Qualifications:

   a. This service should only be used when less restrictive services are inadequate to meet the needs of the patient.

   b. This is a service and not a facility. It may be offered by a comprehensive psychiatric hospital (public or private), as part of a joint effort by a local general hospital and a community mental health center, in a specialized psychiatric wing of a general hospital, etc.

   c. Because of the expense and relative intrusiveness of inpatient hospitalization, patients will not be placed here simply because they are awaiting psychiatric evaluation or in need of occupational or recreational therapy or in need of removal from the family situation; in these cases 24- hours-a-day nursing care would not be required and less restrictive and less expensive alternatives would be available.

   d. Due to the specialized needs of certain population groups (e.g., the elderly or children) specialized short-term inpatient programs may be desirable in some regions. This approach is encouraged where the need warrants it and where resources are sufficient to support it. In using the DSS model these specialized programs would be counted as short- term inpatient bed resources.

D. Transitional

1. Definition: This is a short-term preventive and aftercare living arrangement and treatment program designed to develop or restore an individual's capacity to live in the community. It usually provides independent-living education, medication monitoring, individual and group counseling or therapy, social and recreational activities, and vocational rehabilitation.

2. Estimated Average Length of Stay: 45 days

3. Estimated need per Nebraska's 1980 population: 300 beds

4. Persons to be served: This service is directed at two primary classes of individuals. First, persons returning from more restrictive treatment settings, such as inpatient services, would use the transitional program as a means of adjusting to group living and to the community, in preparation for movement to outpatient treatment, residential alternatives, or some other form of community living. Second, persons in other elements of the system, such as outpatient or intermediate, or persons from outside of the system, may need to move into the transitional program during periods of stress so that they can soon recoup and return to the community.

   The transitional program will primarily provide a place to live with supervised room and board, but will also have educational and therapeutic programs designed to facilitate maximum functioning as soon as possible. Occupational and recreational programs may be shared with some other element (such as intermediate), and some group therapy programs from the outpatient services may be available to selected transitional clients. Some transitional programs may be able to incorporate these adjunctive services within their own program.

5. Assumptions/Qualifications:

   a. This program serves as an alternative to short term inpatient service in those cases where persons do <u>not</u> need intensive medical supervision.

   b. Some transitional residents will be found to be unable to function well in even this setting and will need referral to some more comprehensive or restrictive program, such as extended inpatient.

   c. This program is not designed to provide service on a long-term basis. Persons with chronic conditions who require periodic, short term involvement may be served.

   d. Small residential settings are preferred as the location for the service.

E. Intermediate

1. Definition: A planned and integrated program of therapeutic activities generally provided in sessions of three or more hours to groups of recipients. Service activities usually include organized and planned treatment programs based on medical, social, psychological, educational, and vocational evaluations.

2. Estimated Average Length of Stay: 90 days

3. Estimated Need per Nebraska's 1980 population: 450 slots

4. Persons to be served: This service is geared for the person with a satisfactory setting in which to live (day treatment

client) or a job (night treatment client) but who needs structured, multidisciplinary treatment for several hours daily. Typically, such persons will have had a recent history of significant disturbance which has rendered them incapable of functioning in normal roles or of mobilizing themselves to resume such functioning because of their intense distress.

A typical patient would be a person returning from inpatient treatment, participating in intermediate service as preparation for transfer to an outpatient group. Psychiatric monitoring of medication would be available. In addition to serving those who are identified as primarily in intermediate service, this program would also serve as an adjunct to other programs, such as transitional and short-term inpatient, especially in less populous areas where such sharing of services would be important to save money and to provide a full range of service. Although some persons would stay for a number of months in this program, it would be expected that there would be improvement to some other service within several months, on the average, or the person would be transferred to the community support program.

5. Assumptions/Qualifications:

   a. This service may serve as an alternative to inpatient care or as a transition from inpatient care or as a supplement to outpatient treatment.

   b. This program is not designed to provide services on a long-term basis. Persons with chronic conditions who require periodic, short-term involvement may be served.

   c. This program is contrasted to Daycare, which have a longer term focus and which serve persons with chronic mental, social, vocational, recreational, and life-skills difficulties. By contrast, this program has a short term focus, assumes the person has acquired most of the broad range of skills needed to function independently and productively but needs treatment directed toward reducing the immobilizing anxiety and distress which has kept the person from adequately utilizing those skills and toward improving coping skills. This service may be useful in promoting patterns and habits of social interaction and in altering faulty patterns and attitudes.

F. Community Living Services

1. Definition: Long-term services in sessions of three to eight hours designed to maximize community adjustment and prevent hospitalization. Service activities include training, support, and maintenance such as: independent and community living skills; problem-solving, prevocational training, medication education, social skills building, and leisure time activities to meet the interests, needs, and desires of the individual.

2. Estimated Average Length of Stay: 1 Year.

3. Estimated Need Per Nebraska's 1980 Population: 2,156 Slots.

4. Persons to be served: Chronically mentally ill individuals, often with histories of multiple or long-term hospitalizations. They are characterized by social withdrawal; marginal living, vocational, and recreational skills; inadequate family or social supports; and inappropriate social behaviors. They often need public financial assistance for out-of-hospital maintenance.

5. Assumptions and Qualifications:

   a. Services may be provided evenings and weekends.

   b. While services may be provided over a range of hours and days, client participation is based on need.

   c. This service may be the focus of other social and recreational opportunities such as drop-in socialization, social club, recreational events, etc.

G. Sheltered/Supportive Employment

1. Definition: Work opportunities and corresponding training for persons unable, because of their level of disability, to enter the competitive employment market. These services are intended to provide the recipient with extended employment opportunities and work adjustment training and when possible, transition to more independent and/or competitive employment. Examples include workshops, transitional employment, work stations, and volunteer work.

2. Estimated Average Length of Stay: 18 Months.

3. Estimated Need Per Nebraska's 1980 Population: 864 Slots.

4. Persons to be served: Those whose mental illness interferes with their functioning at a competitive level of employment but who have vocational potential and, in some cases, have the ability to progress to more independent vocational opportunities.

5. Assumptions and Qualifications:

   a. This option must allow for both long-term employment and the opportunity for occupational mobility.

H. Residential Alternatives

1. Definition: Services providing a variety of supportive long-term living arrangements established for persons with mental illness. These are supportive living situations which contribute to the individual's ability to live outside of treatment environments. Examples of residential alternatives include: group homes, supervised apartments, cooperative homes, foster care, and adult family homes.

2. Estimated Average Length of Stay: 3 Years.

3. Estimated Need Per Nebraska's 1980 Population: 1,884 Beds.

4. Persons to be served: Those who no longer require inpatient services but who are not able to live independently in the community. They have varying degrees of need for structure and support and many need help in a variety of independent living skills such as money management, landlord-tenant relationships, house cleaning, cooking, laundry, and shopping.

5. Assumptions and Qualifications:

   a. Persons using residential alternatives should also be receiving other services (e.g., outpatient, sheltered supportive employment, community living services, etc.).

   b. There should be a continuum of residential alternatives so that individuals can move to greater or lesser structure depending on their need.

I. Structured/Supportive Long-Term Residential

1. Definition: A long-term residential service, with a controlled environment, providing 24-hour staff coverage, supervision of medication, assistance in basic living skills, and specific levels of recreational and socializing activities for persons with severe, persisting mental disability. This service should be capable of managing patients with impaired judgment, defective impulse control, or other conditions or circumstances requiring a restrictive setting.

2. Estimated Average Length of Stay: 5 Years.

3. Estimated Need Per Nebraska's 1980 Population: 1,500 Beds.

4. Persons to be served: This service provides maintenance and support to: (a) individuals who have been unresponsive to years of intensive treatment and are unable to function in less restrictive alternatives, and (b) elderly persons for whom nursing home care is appropriate but whose mental health problems prevent them from being cared for in a typical nursing home.

5. Assumptions/Qualifications

   a. This is generally not a point of entry to specialized mental health services.

   b. This is an inappropriate service for children and adolescents.

II. The Multi-Regional Level

A. Specialized Children's Residential

1. Definition: A residential setting providing intensive evaluation and treatment to children too disturbed to be appropriately treated in a less restrictive setting. This is a treatment program providing appropriate educational services and a graduated return to a less restrictive setting.

2. Estimated Average Length of Stay: 6 Months

3. Estimated Need per Nebraska's 1980 Population: 30 Beds

4. Persons to be served: Children whose level of emotional disturbance is sufficiently severe as to require intensive treatment and specialized programming in a restrictive environment on a medium-term basis. These children's disorders are anticipated to be ameliorated and their level of functioning restored through mental health treatment. Children with autism or severe management problems would be typical residents.

5. Assumptions/Qualifications:

a. This service must be well integrated and coordinated with other relevant community agencies (welfare, schools, juvenile justice, etc.).

b. This service may on occasion be used as a <u>short-term</u> respite care service in those cases where removal of a child from his/her environment is necessary for therapeutic reasons.

c. This is a mental health service and is not an appropriate placement for school or criminal justice problems unless these are <u>clearly</u> identified as symptomatic of or concurrent with serious mental health problems.

B. Specialized Adolescent Residential

1. Definition: A residential setting providing intensive evaluation and treatment to adolescents too disturbed to be appropriately treated in a less restrictive setting. This is a treatment program providing appropriate educational services and a graduated return to a less restrictive setting.

2. Estimated Average Length of Stay: 9 Months

3. Estimated Need per Nebraska's 1980 Population: 110 Beds

4. Persons to be served: Adolescents whose level of emotional disturbance is sufficiently severe as to require intensive treatment and specialized programming in a restrictive environment on a medium-term basis. These adolescent's

disorders are anticipated to be ameliorated and their level of functioning restored through mental health treatment. Typical residents would be schizophrenic youth or adolescents with behavior problems which are so severe that they could not be managed in a group home. An emphasis would be on active treatment with expected movement toward sufficient control of symptoms so that residential alternatives, such as group homes, or return to the family home with outpatient support would be expected.

5. Assumptions/Qualifications:

   a. This service must be well integrated and coordinated with other relevant community agencies (welfare, schools, juvenile justice, etc.).

   b. This service may on occasion be used as a <u>short-term</u> respite care service in those cases where removal of an adolescent from his/her environment is necessary for therapeutic reasons.

   c. This is a mental health service and is not an appropriate placement for school or criminal justice problems unless these are <u>clearly</u> identified as symptomatic of or concurrent with serious mental health problems.

C. Extended Inpatient

1. Definition: A hospital setting providing active treatment with the anticipation of eventual habilitation or rehabilitation. Candidates for this level of care would be persons who have not responded to short term interventions, but who are evaluated as able to respond to long-term individualized treatment. This service should have the capacity to provide for controlled egress for patients with impaired judgment, impulse control, or other conditions or circumstances requiring a restrictive setting.

2. Estimated Average Length of Stay: 1 Year

3. Estimated Need per Nebraska's 1980 Population: 160 Beds

4. Persons to be served: These patients are severely and persistently (as contrasted with recurrently) mentally disabled with multiple problems which keep them from adapting in less structured long term placements. They often have received short-term treatment but did not respond sufficiently well for discharge to the community yet are evaluated as able to respond to long-term individualized treatment. These patients typically have a history of having been tried in less restrictive settings (such as Short Term Inpatient and Outpatient care) on at least two occasions, usually more, without success. The modal diagnosis is chronic schizophrenia.

5. Assumptions/Qualifications:

   a. This service may provide "locked ward" capability for patients who are unmanageable in Short Term Inpatient care, sometimes for relatively brief periods.

   b. Patients leaving from this element would typically move to outpatient, transitional, or community support services at the regional level.

   c. This is an active treatment environment, not a custodial service.

III. The State Level

A. Severely Disturbed and Disruptive Children Inpatient

1. Definition: A hospital setting providing complete security and control for children who could not be treated in a less restrictive environment. This service has the capability of providing comprehensive evaluations and long-term treatment. This setting requires specialized educational and treatment programs with unique staff training.

2. Estimated Average Length of Stay: 1 Year

3. Estimated Need per Nebraska's 1980 Population: 15 Beds

4. Persons to be served: Children who are severely emotionally disturbed and require a highly restrictive setting on a long-term basis. Usually the child will have a long history of treatment failures in less restrictive settings. A typical patient would be an assaultive and self-mutilative autistic child, perhaps with concurrent organic problems.

5. Assumptions/Qualifications:

   a. Children served will typically have received care in Children's Residential first, and will move back through Children's Residential when appropriate.

   b. This service is <u>not</u> an alternative to the criminal or juvenile justice systems.

B. Severely Disturbed and Disruptive Adolescent Inpatient

1. Definition: A hospital setting providing complete security and control for adolescents who could not be treated in a less restrictive environment. This service has the capability of providing comprehensive evaluations and long-term treatment. This setting requires specialized educational and treatment programs with unique staff training. This service is not intended as an alternative to the criminal justice system, but may provide services to mentally disturbed adolescents who are involved in that system.

2. Estimated Average Length of Stay: 2 Years

3. Estimated Need per Nebraska's 1980 Population: 30 Beds

4. Persons to be served: Adolescents who are severely emotionally disturbed and require a highly restrictive setting on a long-term basis and who may be classified as dangerous to others. Usually the adolescent will have a long history of treatment failures in less restrictive settings. A typical patient would be a psychotic adolescent with a very limited repertoire of adaptive behaviors, little impulse control, and perhaps other handicaps as well.

5. Assumptions/Qualifications:

   a. Adolescents served will typically have received care in Adolescent Residential first, and will move back to Adolescent Residential when appropriate.

   b. This service is <u>not</u> an alternative to the criminal or juvenile justice systems.

C. Security Inpatient

1. Definition: A hospital setting especially designed for persons whose potential for dangerousness requires extreme restrictiveness or who, for legal and psychiatric reasons, require close supervision and control during a hospitalization. This setting provides typical psychiatric inpatient services, but also provides added structure, supervision, special physical design, and unique staff training. An internal gradation of levels of restrictiveness, including quarterway services, may be provided.

2. Estimated Average Length of Stay: 3 Years

3. Estimated Need per Nebraska's 1980 Population: 125 Beds

4. Persons to be served: Emotionally disturbed persons whose potential for dangerousness to others requires extensive restrictiveness and who, for legal and psychiatric reasons, require close supervision and control during hospitalization. These may be divided into two primary groups: a) disturbed offenders, persons found not guilty by reason of insanity, mentally disordered sex offenders, persons found not competent to stand trial, and penal complex transfers; b) severely disturbed, resistive or combative mentally ill dangerous persons who need more structure than provided in Extended Inpatient or Short Term Inpatient Care.

5. Assumptions/Qualifications:

   a. This service is <u>not</u> intended to be an alternative to the correctional system. The primary criterion for persons admitted should relate to the severity of mental and/or emotional disturbance rather than degree of dangerousness.

b. Some of the persons served would be so seriously disturbed or responsible for such heinous crimes that the expectation of release would be very small. Others would be expected to graduate to a quarterway service (which may be part of this program) or other less restrictive services elsewhere in the system.

c. "Evaluation-only" services are provided on a very limited basis, with a major shift from the past practice of Security Inpatient admission for evaluation to Outpatient evaluations (in jail, if necessary). Patients are transferred to other, less restrictive programs whenever possible.

APPENDIX IV

A Model for California *
COMMUNITY MENTAL HEALTH PROGRAMS

Facilitator:
Barbara N. Burke, President,
Mental Health Association of Marin

Editor:
Areta Crowell, Ph.D., Los Angeles County Community Mental Health

Publisher:
Mental Health Association of California

* This 1982 version will be substantially revised by early 1986. The revisions will be primarily in the areas of long term care standards, the elderly mentally ill, and children and youth.

This book is dedicated to all those who are touched by mental illness: consumers, families and friends, mental health professionals and administrators, politicians, volunteers and advocates; all decision-makers who affect the lives of the mentally disabled.

May we all begin to work more closely to provide appropriate, humane and loving mental health care and treatment for Californians in need.

ACKNOWLEDGEMENTS

The Mental Health Association of California gratefully acknowledges the dedication and hard work of the participants of the Legislative Work Group. And thanks to their families and friends for their support and encouragement during the roughest times.

We are grateful for the courage and vision of the California Assembly Permanent Subcommittee for Mental Health and Developmental Disabilities chaired by Tom Bates under whose leadership this work was nurtured.

Areta Crowell, Ph.D., gave tirelessly of her energy and talents in editing the sequential drafts of this Model. The facilitator especially appreciates her personal warmth and enthusiastic support during the difficult times.

Special thanks are extended to photographer Ernest Braun of San Anselmo for offering the generous gift of his sensitive and powerful photographs for use in this publication.

This publication would not have been possible without the contributions of Zellerbach Family Fund and the Acorn Foundation. We appreciate their understanding of the significance of a document like this, and we thank them for their generosity.

Barbara N. Burke

Barbara N. Burke
Mental Health Association of California

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BACKGROUND

In Spring 1979, the California Assembly Permanent Subcomittee on Mental Health and Development Disabilities held a hearing on "What Mental Health in California Would Look Like in Five Years." At this first meeting of the Subcommittee chaired by Assemblyman Thomas H. Bates, it became clear that a comprehensive, systematic mental health program for California citizens was not yet in place, and could not be anticipated to be in place within five years.

Chairman Bates and the Subcommittee unanimously voted to ask a coalition of mental health providers and consumers to develop a consensus among themselves and their constituencies about appropriate mental health care in California. The Mental Health Association in California, a volunteer advocacy group for the mentally ill and for mental health, was asked to facilitate the group, which came to be called the Legislative Work Group.

Chairman Bates helped identify providers and consumers, as well as interested lay persons, to work together to develop a proposal for presentation to the Subcommittee. The Subcommittee, at the Spring 1979 meeting, recalled that important mental health legislation had been initiated by the Subcommittee in the past, and felt that — given the lack of appropriate mental health care and services — it would be desirable to again put forth omnibus legislation. The results of the Legislative Work Group's efforts would be a major contribution to such legislation.

Participation in the Legislative Work Group has been demanding in talent, energy and time commitment. Many participants volunteered their time and paid their own expenses. Those contributing and participating in the process include:

Facilitators

Present: Barbara Burke, Mental Health Association in California

Past: Peter DuBois, Mental Health Association in California

Participants

The following persons have at some time participated in meetings of the Work Group. They are shown with their affiliation during participation.

Joan Amundson, Consultant, Assembly Permanent Subcommittee on Mental Health and Developmental Disabilities
*Marcia Buck, Organization of Mental Health Advisory Boards
*Lila Berman, Citizens Advisory Council
Carmen Carrillo, Ph.D., Citizens Advisory Council
Dan Chandler, Legislative Analyst
*Areta Crowell, Ph.D., California Conference of Local Mental Health Directors
*J.R. Elpers, M.D., California Conference of Local Mental Health Directors
*Steven Fields, California Association of Social Rehabilitation Agencies
Jim Garcia, Department of Mental Health
Fran Hoffman, California Association Families of Mentally Disabled
*Tony Hoffman, California Association Families of Mentally Disabled
*Kay Kneprath, California Psychiatric Association
*Bob Ledbetter, California State Department of Mental Health
Susan Mandel, Ph.D., Alameda County Department of Mental Health
Joan Meisel, Consultant to Assemblyman Howard Berman
Diane Messer, LLD, Western Center on Law and Poverty
Frances Morain, Association for the Mentally Ill of Napa State Hospital
Frank Morain & Ken Jacobson, Association for the Mentally Ill of Napa State Hospital
Lenore Morrell, Ph.D., Office of Statewide Health Planning and Development
*Gerald E. Maguire, M.D., California Conference of Local Mental Health Directors
Eve Oliphant, Parents of Adult Schizophrenics
Anne Prosser, County Supervisor Association of California
Carl Rauser, Mental Health Management
Truman Schoenberger, California Conference of Local Mental Health Directors
*Mary Ann Stalder, Organization of Mental Health Advisory Boards
Tom Sullivan, El Dorado County Mental Health Services
Frank Dougherty, El Dorado County Department of Mental Health
*Dick Favor, Modoc County Mental Health
Richard Boylan, Calaveras County Mental Health
Bob Egnew, Mendocino County Mental Health
Jim Robbins, M.D., California Psychiatric Association
Ed Gipson, Mental Health Association
Jerry Breen, Stanislaus County Department of Mental Health
Ruth Ann Terry, Citizens Advisory Council
Bob Martinez, San Bernardino County Department of Mental Health

Hewitt Ryan, M.D., California Medical Association
Pat Grice, California Medical Association
*Lynn Zender, California Mental Health Association
*Ed Bernath, Organization of State Hospital Chairpersons
*Lois Lowdon, State Department of Mental Health
Randy Feltman, M.S.W., Children's Committee of Conference of Local Mental Health Directors

Many others contributed invaluable written and verbal input and suggestions.

CREATING A LIVING DOCUMENT

The Mental Health Legislative Work Group, in attempting to develop meaningful mental health care for all citizens in California, set several criteria for its work:

- The Model shall be developed and "owned" by the joint efforts of consumers and providers and no one group should dominate the endeavor.
- A consensus must be reached on all decisions for the group to effect its goal.
- It should develop a "model" of mental health care, which would include minimum standards of service functions.
- It should focus on the public service system (Short-Doyle) portion of mental health care only at this stage, omitting fee-for-service Medi-Cal for psychiatric care.

The group determined basic needs for care, which were evolved into quantitative standards. It studied and developed categories of care, resulting in the Model for California Community Mental Health Programs. The group reviewed the responsibilities of the Short-Doyle programs to assure the availability of mental health services for each county's residents and to serve those who cannot provide service for themselves. In practice, the population with the greatest needs becomes the Short-Doyle (public) responsibility, which highlights the need to prevent the development of severe and chronic disabilities. Persons served in the public system generally represent the severely mentally disordered — those who suffer from psychosis and affective disorders and those who often are not considered "good" patients because of aggressive acting out behavior, nonverbal styles, low socioeconomic status and/or poor prognosis. They are often patients no one else wants to serve: Short-Doyle is the treatment resource of last resort. The experience of the participants, knowledge of the special needs of the population to be served, state of the art experience reflected in the literature, and relevant data from other State and local programs entered into the deliberations of the group.

Phase II

The California Model is expected to change somewhat as a result of further statewide experience using it for planning and program development. Such flexibility is appropriate for a previously untested model and should not detract from its credibility and usefulness.

After the first phase of the Model was completed in January 1980, and widely distributed, a number of questions and concerns were raised which have led to this Phase II document. The fundamental agreements have not changed, but the participants in the process believe it more fully meets the requests of users of the Model for increased clarity in the presentation as well as responding to previously unanswered questions.

It is anticipated that the Model will be a living document, flexible and adaptable to facilitate the efforts to meet the needs of the mentally ill in California, their families, friends and neighbors, as well as to provide preventive services to all citizens of California. As research reveals new information about effective treatment approaches, the Model should be changed accordingly.

Future work will address the integration of other resources and funding systems for the delivery of mental health services in California since Phase II addresses only the services provided by the public, Short-Doyle system. More data than are presently available on the nature and extent of other service systems are necessary to carry out this intent.

The Model is predicated upon the following assumptions, but does not itself address these issues.

1. There must be strong, capable leadership to manage the resources.
2. There must be continuous monitoring of the quality of care and program implementation. Systems for such evaluative and corrective actions are not included in the Model, but it is assumed they would be operational as an independent force working to assure an efficient and effective community mental health program.

The quantitative resources of the Model cannot guarantee a satisfactory mental health program, but, conversely, good leadership cannot provide an effective program with considerably fewer resources than are needed.

The Model should thus help to eliminate the general tendency to confound resource shortage problems with leadership and administrative problems.

PURPOSE

It is the purpose of the Model to serve as the framework for the development and financing of a comprehensive community mental health program in California so that individual and community needs can be met.

Long-Range Planning

It is recommended that the Model be used for long-range planning and budgeting. Comparison of the distribution of existing programs against the Model standards easily identifies those areas where a program has the greatest discrepancies between the actual and the Model. This analysis can help to assure that important functions of a community mental health program are not overlooked or kept too small and can be used to assure development of a balanced system.

This Model, if applied as a service system, eliminates the need for categorical funding as specific protection for any of the elements described in the Model. The existing County service patterns are so disparate that statewide selection of one or another function for funding priority may penalize some County efforts to develop a comprehensive, balanced system. The Model can be used by the State administrative authority and by local planners to bring about the necessary balance of functions through locally prioritized program development without categorical funding or legislative mandate.

Coordination of Planning

Inclusion of the Model program as the framework of the State Three-Year Plan for Mental Health can facilitate the statewde coordination of State and County functions, and ultimately help to increase the comparability of local programs. It can provide the basis for accurate and meaningful aggregation of local data to provide a statewide program description. It can also increase the ability of state and local planners to identify priorities for program development in order to maximize the coordination of Federal, State and local funding.

The Model also provides the necessary common terminology to facilitate coordination of the various levels of health planners, including County Short-Doyle authorities, local Health Systems Agencies, and State health planning and mental health authorities. Much confusion occurs when health planners must make judgments on the need for one type of 24-hour care and treatment (e.g., acute hospital services) — without adequate recognition as to how the availability of a continuum of care affects the need for acute services. The Model should greatly facilitate coordination of mental health and related planning efforts.

Limitations of Phase II: Only Short-Doyle System Planning

It is not the purpose of the Model at this phase of development to serve as the all-inclusive statement of need for mental health programs. That is ultimately the responsibility of the State and local health planning agencies. Fee-for-service Medi-Cal, Veteran's Administration and other private sector services are not administered by the same mental health authorities as the Short-Doyle program (see p. 42). In the next phase of development we intend to discuss incorporation of those resources into the Model. Based on reasonable epidemiological data, full implementation of the Model, together with the continuation of existing fee-for-service Medi-Cal and other private practice non-Short-Doyle resources, are necessary to meet the needs of the residents of California. In the interim, specification of the level of Short-Doyle responsibility should assist in the further technical development of mental health planning.

Public and Private Planning

The Model recognizes the valuable role of private providers in serving the mental health needs of public patients. The place where the respective roles of public and private providers in a county are considered together is in the formulation of the annual Short-Doyle Plan. As public and private sectors join together in the drafting of the County Plan, this process helps ensure that the allocation of resources for public patients will be properly balanced between public and private providers.

PHILOSOPHY

Comprehensive, Balanced, Appropriate System

The basis for the Model is a comprehensive mental health system, a balanced system of mental health services appropriately available to all Californians. The functions of the system emphasize the consumer's right to receive services in the least restrictive level of care and setting, and availability of services to all citizens, both clients and non-clients, for prevention of mental illness as well as treatment for the mentally ill. Special efforts must be made to reach underserved portions of the population through outreach and other means. For example, the mental health needs of minorities have generally not been adequately addressed or met. Accordingly, it is necessary to identify those program areas with special relevance to the mental health needs of minorities and to provide guidelines for the development and delivery of services to such populations.

The Model defines a comprehensive, balanced mental health system as one including levels of care which are not only singularly available to clients who require specific treatment, but are linked to one another in a network to provide the most appropriate level or type of service for each client. A client appropriately would move through these services as determined by diagnosis and assessment; however, some clients may remain indefinitely at a certain level of care according to individual needs. Linkage between the elements of the system is essential to assure appropriate service delivery.

Emphasis on Community Adaptation

It is the basic philosophy of the Legislative Work Group that mental health services, including preventive services, be provided in a manner culturally, linguistically, and age-appropriate and specific to the nature of the community and the needs of clients. These services are to be provided in the most humane manner, as close to a normal home environment as possible, when possible in a community-based setting, without sacrificing client safety or care.

The Model emphasizes the range of service functions which should be available to meet the needs of community residents; it is not to be interpreted as a rigid, facility-based design, although it does show the relationship of various facilities and programs to the necessary service functions, i.e., the range of administrative arrangements that can provide the variety of functions in cost effective ways.

Attention to the physiological issues of mental illness must be considered in diagnosis and assessment. Individual needs should be met with attention to the types and levels of disability and the individual's own choice about treatment approaches.

Least Restrictive in Attitude and Environment

It is a fundamental right of patients to be served in the least restrictive setting that can effectively meet their needs. A balanced system addresses "least restrictive" in terms of both attitude to clients and an environment which can help to create a non-rigid system. These services would be culturally, linguistically and age relevant in a continuum from acute intensive inpatient treatment through various non-hospital residential programs to outpatient and community support. The elements would include psychotherapy, medications, other outpatient services, case management and rehabilitation. There would be emphasis on the priorities of appropriate levels of medication, on the practical skills and rehabilitation necessary to attain independent function, the importance of normal residential settings, the assumption of ability rather than disability, and positive expectations of client performance. The system would include smaller facilities, client involvement in decisionmaking, and immersion of the client in the community in normative settings. It must be noted that the Legislative Work Group is definite in its posture that the State hospitals' resources must remain available until appropriate alternatives are in place in communities.

Alternatives to Hospitalization

The Model puts forth a full system of alternatives to institutional settings which have as a focus the rehabilitation of clients in the mental health system. These alternatives should have specific linkages with one another, and with the general treatment and social services system as a whole. These linkages would not be limited to the mental health system, but would include community resources utilized by the general population. They provide, at every level, alternatives to institutional settings. The linkages in the continuum will allow clients to move within the system to the most appropriate level of service. They allow for direct referral of clients, without requiring the client to pass through the entire system to reach the most appropriate level.

Most emotionally disturbed persons are likely to recover more effectively and rapidly in appropriate local treatment programs than in distant facilities. Therefore, it is essential to provide for maximum liberty consistent with the protection of the client and the community and appropriate care. It is recognized

that State or regional hospitals have an identifiable role in complementing and supplementing the community mental health system.

Quality of Care Essential

Underlying the philosophy of the Model is the need for assurance of quality care in all services and linkages in the system: there must be a high degree of quality. This important assurance must thread through the fabric of the Model — indeed, hold it together. This assurance of quality would appropriately be monitored by the State Department of Mental Health.

Optimal care for mentally ill persons requires comprehensive attention to biological, social and psychological needs. This balanced attention must be a primary consideration at all phases of a person's care. It must be recognized that this care is created by caring, well-trained human beings. Therefore, this Model affirms that major consideration at all phases of planning must be the training, recruitment, retention, and support of high caliber staff. Recognition must be given to the unique skills of the various mental health professionals and to the need for maintaining an optimal blend of those skills throughout the assessment and treatment process. Employment of professional staff in any or all positions, regardless of discipline, is consistent with this emphasis.

Medications are a necessary and important part of the treatment program for many patients; however, they should not be used as a substitute for other appropriate treatment services.

There is urgent community concern to assure adequate treatment of the difficult, often violent, persons who are admitted involuntarily. Such patients currently constitute a large proportion of public hospital admissions in California; the resources needed to handle these patients as well as other acutely ill persons are counted in the Model standard for 24-hour acute intensive care. However, that resource will not be sufficient if other parts of the system are not in place to provide for timely movement out of an intensive level of care. The result will be unnecessarily and inappropriately long stays. Thus, the full range of treatment alternatives in the Model is necessary and sufficient to treat the full range of public mental health responsibility.

Screening for the presence of concomitant and contributory medical illness should be part of the workup for every patient being admitted to Short-Doyle treatment settings. This screening should include a medical history, physical examination, and laboratory procedures as appropriate. If a comprehensive medical examination has been done within six months, then a review of such examination should be documented in the patient's Short-Doyle record. Other medical treatment costs should be paid for out of appropriate health care sources rather than Short-Doyle mental health funds.

Continued evaluation of the mental health system, and this Model, must take place. The Model should flex to meet the changing needs and mores of communities. Additionally, accountability of programs provided pursuant to the Model to the client and the public is essential.

We should ensure that all segments of the community have been involved in the planning, development, provision, monitoring and evaluation of mental health programs affecting their community. Quality of care standards must assure the cultural relevance of services to the population to be served.

Community Participation in Program Planning and Delivery

Community residents should be heavily involved in the planning and oversight of local mental health programs. Volunteers should also be involved in service delivery wherever possible, especially in community support programs. Such community involvement not only assures local accountability that services will be responsive to unique community populations and needs, but it helps to strengthen the normalization of mentally ill persons into the community/social structures.

INTRODUCTION TO THE MODEL

The California Model is proposed in order to establish both the essential functions of a community mental health program and the relative amounts of services necessary to accomplish the objectives of community mental health programs as established in the Lanterman-Petris-Short and Short-Doyle Acts. Recognizing that there is a need for preventive services and acute intervention, nevertheless the needs of the chronically mentally disabled have been given prime consideration in the development of the Model.

It has been developed to assure that a comprehensive, uniform range of mental health services shall be available through the Short-Doyle system to residents of all counties. It is recommended that there be a standard minimum level of service in each of the "Model" service categories to assure equity and a balanced service system. Implementation of the "Model" system is contingent upon the level of State support for the complete range of service categories; since this is conceptualized as an interlocking system, failure to develop one aspect of the system would impair the overall functioning of the system.

The Model defines a comprehensive, balanced, locally administered service system which emphasizes availability of the most effective services combined with the least restrictive settings. It has been developed with awareness of the strengths and deficiencies of current systems, of the fiscal constraints within the public service sector, and the knowledge that further critical decisions must be made regarding the administration of programs. These issues are discussed in "implementation." Briefly, whatever the administrative arrangement, the standards assume control of the resources by the local Director of Mental Health so that they may be organized most efficiently to achieve the program objectives.

Unique program design and staffing considerations are required to meet the mental health needs of the elderly, children and youth, racial and ethnic minorities, physically handicapped and criminal offenders. Programs and treatment modalities should be planned and implemented to ensure an accessible, equitable, and appropriate response to the unique life experiences of minority residents. It is expected that the resource levels provided according to this Model will enable counties to implement specific program requirements appropriate to each group. Current Short-Doyle utilization patterns for certain of these groups are very "unbalanced," reflecting inadequacies of the existing system; these should change as the system improves. For example, overutilization (largely involuntary) of acute inpatient and State hospitals by some ethnic persons of color is considered to be the result of inadequate outreach and prevention programs and perceived irrelevance of customary outpatient and day treatment services. The absence of the effective community alternatives is believed to increase the use of the most restrictive treatment settings, a result contrary to the philosophical foundation of the entire community mental health movement. It is recommended that proportionately more resources should be directed to Community Outreach Services (Consultation, Education, Information, Community Organization and Outreach) in predominantly minority communities.

The special program balance required by youth and geriatric residents has been added to the Model to clarify the recommended distribution of Model services to these age groups. Local adjustments should be made to correspond to the actual age distribution in each County; the figures given are based on statewide averages.

Local planning must be held accountable to design staff and locate the program elements within the total resources available to raise the effectiveness of services to these special groups and to increase the availability, appropriateness, and acceptability of services to all community residents.

Relationship to Needs Indices

The prescription of necessary amounts of services are given for an average population base of 100,000. The Model is designed to meet the needs of the average number of Short-Doyle eligible persons in an "average" 100,000 population. Adjustments must be made at the local level to take into account the relative poverty of each specific planning area population, the availability of other resources, and the impact of unique age and ethnic distribution on the various levels of services needed.

Most efforts to quantify need are based on indirect demographic indicators of the relative socioeconomic status of populations of different areas. More direct epidemiological methods may provide an estimate of the numbers of persons who are in need, and generally identify the severity of need. Neither approach to need assessment, however, specifies the types of services nor the amounts that should be available. The Model provides the specificity regarding types and amount of services needed in a complementary way to classical needs assessment approaches.

Special Rural Considerations in Application of the Model

The principles of this Model can be achieved even when population centers are small or widely dispersed. Access to the full range of Model service functions is needed by all California residents.

There are, however, certain special considerations which must be kept in mind in applying the Model to sparsely populated areas. For example, in such areas, more than one category of service may be provided by the same staff depending on the particular needs of the individual clients to be served at that particular time. Such functions as outpatient services, consultation, education and case management would typically be provided by the same staff, in a single, unified program. It is, therefore, imperative that these programs not be restricted or excluded from funding solely because their service delivery system is generic and multi-functional. It is also important to recognize that the quantitative level of the Model functions may fluctuate in small programs and further that it may be possible to provide comparable functions in a smaller number of settings than is specified in the Model. Thus, flexibility is assumed in applying the Model to rural areas. In addition, services to mental health clients may often be provided in close collaboration with other local agencies and professionals, making it difficult under such circumstances to distinguish a mental health service from a child protective service or a school counseling service. Crisis and transitional residential care may be provided in a portion of an appropriate residential care facility with outside staff providing separate and additional services as indicated by the needs of the clients. Acute, intensive care might be provided in several of the regular beds in a local general hospital with augmented psychiatric nursing care for the more disturbed patients provided by means of an on-call roster of nurses and aides. Community physicians would assume more than the usual level of responsibility for the care and treatment of such inpatients, with back-up consultation from a psychiatrist. This close collaboration of services in no way suggests that sparsely populated areas need fewer staff equivalents than persons with similar needs residing elsewhere.

Such factors as long distances to be traveled, fluctuating utilization rates and the need for special, outside technical assistance can result in higher than usual overhead or administrative costs in sparsely populated areas. For example, mental health services may be required to fund a transportation capability where no public transportation exists and where distances would be a deterrent to patients obtaining services. There is also an absolute minimum number of administrative staff required to support any program. If fewer administrative staff are provided, the program will not be viable. Flexibility must thus be available in applying these quantitative standards to sparsely populated areas.

It also must be kept in mind that at some point a given category of service cannot be feasibly implemented because the population to be served is so small as to result in an unacceptably low utilization. However, such thresholds of feasibility can only be determined by each local area based on its unique needs and resources. When the feasibility for a category of service is found to be low, regional services should be developed by inter-County agreements, under local control and designed to serve a natural catchment area. An example might be programs for those few patients who present such significant management problems as to require care in a special regional facility.

Special Minority Considerations in Application of the Model

There are, also, unique considerations when applying the Model to minority populations. Treatment services for these populations must combine education, crisis intervention, outreach, and various therapeutic approaches.

The emphasis must be on this combined treatment approach, not on fragmented services that consist of only preventive or educational methods and if these fail, admitting the individual to an inpatient unit on an involuntary basis.

It must be clearly stated that there is a large segment of the population who — for age, cultural, linguistic, or personal reasons — cannot utilize the traditional mental health services delivery system. It is the responsibility of a comprehensive system to provide the community/treatment services necessary for these populations. These services must be relevant and useful within the individual's belief system. It is not realistic to expect an emotionally distressed person to change his/her belief system to become eligible for mental health services. Professional backup in the form of staff training, consultation, and case supervision would allow a broad range of human care agencies to handle increasingly more complex mental health situations, thereby referring fewer cases into the Short-Doyle Mental Health treatment system. This is much more advantageous to the individual, as it minimizes the disruption of normal productivity by utilizing existing familial and community support systems to maximum benefit.

Given this basic support system, even extremely small numbers of clients within a given community could be appropriately served. The goal is to provide quality mental health services to as many of the population as possible. Hiring bilingual, bicultural professionals does not diminish services to the dominant culture; it simply enhances the spectrum of

services to an additional and important segment of the population.

Forensic Mental Health

A separate category of Forensic Mental Health services to persons who are or have been under justice system jurisdiction is appended to the overall Model. The service needs of this target group fall within the spectrum of services described in the Model. However, due to the unique nature of the target population and the need for ongoing credible interaction with the justice system, programs are often specifically designed. Some programs may be operated within a secure environment, either inside or outside a detention facility. The categories of service and basic standards are summarized separately under the heading of Services to the Justice System, Forensic Mental Health (Adult) and Services for Mentally Disordered Wards and Dependents of the Juvenile Court.

STANDARDS FOR SERVICES: THE PROPOSED MODEL

It is recommended that counties assure their clients have access to the following mental health services. For each service, a population-based standard is expressed in terms of a minimum level of service per 100,000 population. Separate tables showing the recommended distribution of services for children and geriatrics appear on pages 31 and 32.

Service Function	Standard Service Level Per 100,000 Population
1. Twenty-Four Hour Acute, Intensive Care	15 beds
2. Short-Term Crisis Residential Care	10 beds
3. Twenty-Four Hour Transitional Residential Care	20 beds
4. Long-Term Rehabilitative Care	40 beds
5. Out-of-Home Placement	
a) Supervised Out-of-Home Placement	60 beds
b) Semi-Independent Living	15 beds
6. Emergency Services, Crisis Intervention, Screening, Evaluation and Disposition	a) 24-Hour Emergency Evaluation Treatment and Holding Services (for approx. 1,000 persons annually).
	b) 1 Crisis Intervention Program (7 da/wk, late afternoon-evening shift, 2 FTE [Full-time equivalent personnel] staff)
	c) Mobile Crisis Service: 150 visits/yr.
7. Acute Day Treatment	— One acute Day Treatment program of 9 staff to deliver 7,000 units of service
8. Outpatient Services	— One Outpatient Clinic of 20 staff to deliver 16,250 units of service
9. Case Management	— 8.6 FTE professional staff plus support staff and tracking system
10. Community Support Services	13 FTE staff
a) Day Rehabilitation	9 FTE
b) Socialization	2 FTE
c) Services to Semi-Independent Living Programs	1 FTE
d) Respite Care	1 FTE
e) Companion (Volunteer) Program	
11. Community Outreach Services (Consultation, Education Information, Community Organization and Community Client Contact)	6 FTE staff
12. Mental Health Advocacy	.5 to 1.0 FTE staff
13. Services to the Justice System—Adult and Juvenile	

The goal in the development of 24-hour care services in categories 1 - 5 is the creation of a continuum of care that allows for treatment in the least restrictive, most effective setting appropriate to each client. In each of the categories, the intent is to provide a range of settings in order to develop specific services geared to individual needs. Therefore, 24-hour services are envisioned in settings ranging from general hospitals for those psychiatric patients requiring medical care and support, as well as medical patients requiring psychiatric services, to residential alternatives to institutions such as semi-independent living programs. The various levels of care, from acute to out-of-home placement, are assigned minimum bed levels in a ratio designed to encourage the development of transitional services. All patients entering a 24-hour setting should have had a recent medical history, physical, and appropriate medical evaluation, with results in the mental health record.

In sparsely populated areas the necessary range of intensity levels and type of services could be provided in multi-functional settings, with shared staff, thus reducing the expected number of 24-hour program settings but not minimizing the variety of functions to be provided.

The proposed standards for 24-hour care services (categories 1 - 5) include a total of 160 beds of all varieties for the Short-Doyle-eligible persons in each 100,000 general population. Prior to the development of Short-Doyle, there were approximately 37,000 mentally ill persons in State hospitals. At that time the population of California was 16,000,000. Disregarding the beds in local hospitals that were at that time occupied by the mentally ill, the State hospital utilization corresponded to 231 beds per 100,000, thus the standards continue the national trends away from institutional-based, 24-hour care.

1. **Twenty-Four Hour, Acute, Intensive Care**

Persons to Be Served

This level of care is appropriate for patients who are severely and acutely mentally disordered, both voluntary and involuntary, often with associated medical problems.

Patients who are characterized by marked impairments, i.e., violent, suicidal, may require restraints, typically require medication and need intensive treatment. For planning purposes, the need for acute care is determined by the severity of the dysfunction, regardless of the length of treatment time required. Only persons who are extremely impaired should be treated in these expensive, high-demand resources. If the impairment is less serious, other levels of care would be adequate and appropriate. Likewise, persons should generally move from these into less intensive settings as quickly as possible.

This category of care must meet Title 9 inpatient staffing standards, and may be provided in both hospital and non-hospital settings. Because some of the patients to be treated are non-ambulatory, have organic disorders, medical complications or have been physically damaged (e.g., trauma from accidents, etc.) some services *must* be hospital-based. Some patients with severe functional mental disorders may also require hospital settings: e.g., intravenous feeding for catatonic or severely depressed patients. So long as the treatment program provides effective, medically supervised, acute, intensive mental health care, however, such care can be provided in settings other than general or free-standing hospitals. These non-hospital settings include a "skilled nursing facility" (SNF) with appropriately augmented staff, or a "psychiatric health facility" (PHF).

Description of Services

These services are to provide immediate, round-the-clock, intensive crisis care and treatment with clear medical direction and orientation, including comprehensive medical examination at the time of admission.

The standard is for 15 beds per 100,000. The balance of different types of acute care settings to be used may require adjustment according to local needs; most significantly, high incidence of PCP* use would require relatively more hospital-based beds per 100,000. The standard of 15 would include all acute care regardless of age and setting. Where State hospitals provide acute care, they may be counted as "existing resources" for comparison with the standard, but it is the premise of the Model that the acute care would generally be provided in local services settings.

*Toxic psychoses due to PCP generally require hospital-based mental health treatment.

2. **Short-Term Crisis Residential Care**

Persons to Be Served

This level of care is appropriate for acute, usually transient disorders, involving cooperative voluntary patients not needing continuous medical supervision. It is generally appropriate for persons undergoing severe situational disturbance or stress reaction marked by temporary impairment and inability to function.

Description of Services

Generally, 5 - 10 beds per 100,000 will meet the need for this level. The services would be provided in community care facilities or other residential

settings, but *not* in acute hospitals, skilled nursing or intermediate care facilities. Stays will be brief, usually not longer than two weeks. Clients may not require medication and the facilities are typically non-locked.

This program would generally be provided in one phase of the Community Residential Treatment System (CRTS-AB3052). It could also be provided through acute treatment in a family care setting with sufficient resources for supervision and intervention (e.g., Southwest Denver paradigm).

3. **Twenty-Four Hour Transitional Residential Care**

Persons to Be Served

Two groups of patients are to be served in this level: (1) Patients who have been treated at an acute stage of illness, but who have not yet returned to their prior level of functioning; and (2) patients who have been chronically dependent and/or institutionalized and who need assistance to return to independent living settings.

Patients will generally have had a recent hospitalization, but present no immediate control problems. They are generally persons with basic problems of impulse control, life organization and inappropriate behavior. A wide spectrum of diagnostic categories would be found, including thought disorders, borderline conditions, affective disorders and those organic conditions with a good prognosis. Some persons experiencing situational disturbances could be included, but generally for much briefer stays than the median for this modality. Conservatees could be included, though generally clients would be voluntary.

This would generally be the most appropriate category of 24-hour care for children and adolescents. Children and youth appropriate for this level of care would include those with serious impairment in personality development and with behavioral disturbances sufficiently severe to require temporary placement away from the home environment.

Description of Services

These are appropriately staffed social rehabilitation programs not tied to Title 9 staffing; they are intended to provide an interim step, now largely absent from the system, to assist clients after an acute stage of illness who have not yet returned to their prior level of functioning or to assist persons who have been chronically dependent and institutionalized into independent living. The intent is to restore the client to a normalized lifestyle. It is, therefore, desirable that these programs be provided in small residential settings to the maximum extent feasible. Such an environment enhances the efforts to help the client make a transition to normal life.

Support and 24-hour supervision must be an integral part of the program as well as active involvement in growth services in order to assist clients with impaired functional abilities to move from acute care to less protective and more independent functioning. Without the support of the program, clients would be at risk of returning to the hospital. There is a broad range of community services which should be provided in conjunction with the residential service, though generally not on the same site. The adjunctive services include day treatment, vocational and prevocational training and rehabilitation, and outpatient (e.g., verbalization, remotivation). Facility staffing will be heavy in evenings and on weekends; during the daytime, most clients should be involved in adjunctive programs. Staff must be skilled in providing guidance and encouragement to use other community services.

This generally should be the most frequently used category of 24-hour care for children and adolescents. Approximately 20 beds per 100,000 population are needed at this level, of which half would be for children and adolescents. The program will emphasize helping the youngster to develop appropriate social responses, to internalize controls, and to improve school performance and interpersonal skills. Staff will provide role modeling. Transitional care can occur in appropriately augmented facilities such as specialized ("treatment") foster homes, group homes and intermediate term residential treatment facilities. Utilization of community resources should be an integral part of the program. Young people in this program will attend special schools.

4. **Long-Term Rehabilitative Care**

Persons to Be Served

This level of care will serve those persons who have traditionally been relegated to State hospitals or maintenance settings because of behavior which has been unacceptable or unmanageable. They generally are severely and persistently (as contrasted with recurrently) disabled with multiple problems, and cannot tolerate more intensive treatment programs. Many of these are older and non-ambulatory; in addition, there may be young adults and adolescents included.

Description of Services

Persons in these programs require medical services, supervision and closely structured rehabilitation programs to improve their basic functioning. A major focus will be remotivational care and social training within a protective setting. It is estimated

that an average of 18 months - 3 years may be required to achieve the improved level of functioning, although some may require care for an indefinite period. Staffing is heavily weighted toward occupational and rehabilitational therapies. Medical care is generally supplied by community physicians (funded either by Short-Doyle or fee-for-service Medi-Cal) and is not included in the facility staffing pattern. The service pattern will entail in-house programming 12 to 16 hours/day, 7 days/wk. in addition to 24-hour care and supervision. The long-term residential treatment center category of the Community Residential Treatment System applies to this level of care. Skilled Nursing Facilities with a Special Treatment Program or Intermediate Care Facilities with appropriate augmentation and special rehabilitation program focus, may correspond to this service category. Most long-term rehabilitative care should be provided in non-institutional facilities of less than 30 beds. The standard calls for 40 beds per 100,000 in programs of this type.

5. Out-of-Home Placement

A) Supervised Out-of-Home Placement

Persons to Be Served

This level of care is for clients requiring minimal (less than 24-hour), long-term supervision. Residents should be provided access to the full range of supportive and treatment services, including outpatient care and social rehabilitation, as outlined in their continuing care plan. Most clients who are chronically disabled and are eligible for SSI and Medi-Cal, will require long-term maintenance at this level. Appropriate maintenance and subsistence support is required for persons who would be unable to function in the community without this level of care. Persons who will not accept more intensive treatment options will also be included in these programs.

Description of Services

These services are offered in board and care type residencies which provide for basic personal needs, e.g., food and shelter are provided and any medication regimen is monitored by the board and care staff. Small board/care homes should be homelike and provide the support which would be found in a family setting. Larger homes can include some recreational services. There should be two levels of care available in board/care homes: the basic level is what is included in this component of the Model and these costs are entirely covered by the SSI allowance. The costs of the higher level of care should be included in the community support segment of the Model —board/care and the community support service system must be closely linked. The necessary supportive and treatment services for these persons are included in other parts of the Model (case management, outpatient, etc.). No Short-Doyle costs are shown for this function but these resources should be proportionately available in communities throughout the State.

The standard is 60 beds per 100,000, which is considerably lower than current utilization, with the anticipation that transitional, rehabilitative, and semi-independent living resources will have a significant impact on the ultimate service pattern.

B) Semi-Independent Living

Persons to Be Served

Persons served in this level of care do not require 24-hour support and supervision. They demonstrate acceptable social behavior but require additional assistance to develop skills which will allow them to become self-sustaining in independent living situations. They can typically take care of their physical needs.

Appropriate semi-independent living programs should also be available for youth with emancipation needs. These are youth who are able to move to a program which requires a lower level of care but who have no viable supportive resource available within their own homes. The focus of this type of out-of-home placement program is upon socialization and preparation for independent living.

Description of Services

This is a structured, supervised program to provide the most normal community alternative for persons not able to live independently. The structure is provided by other than live-in support staff, and focuses on day-to-day problems of living in that setting. Individuals may use this program as a transition to independent living or may remain indefinitely in order to avoid the need for more intensive settings. It is estimated that 15 persons per 100,000 would be in these settings at any time; 3-4 apartments would be required for the program. Additional satellite apartments will be needed as clients move through the program and attain more independent status.

Necessary support and treatment services are provided by the "outpatient" and "community support" components of the Model. Residential costs are borne by the clients, usually through their SSI.

6. **Emergency Services, Crisis Intervention, Screening, Evaluation, and Disposition**

These are the primary intake resources for services for the acutely ill, voluntary or involuntary. They may be brought in by police or paramedics, private ambulances, family/friends or neighbors, or walk in or call in alone. There are various ways to assure availability of 24-hour crisis resolution and pre-admission screening. Some capability for mobile emergency evaluation and crisis services should also be provided, especially in sparsely populated areas or rural settings.

A) **Emergency Services Evaluation and Treatment**

Persons to Be Served

Patients served by this service would be exhibiting acute psychiatric symptomatology. Patients may be suicidal or potentially violent; they may be in panic states, behaving bizarrely, confused, hallucinating, or otherwise so disturbed as not to be able to care for their own physical needs. Patients exhibiting psychotic behavior due to acute drug intoxication would also be evaluated here.

Description of Services

This service provides 24-hour, 7-day-a-week emergency evaluation and treatment. A preliminary diagnosis would be made and some form of treatment initiated, usually medication and crisis intervention. This service would provide a capability for a 24-hour holding service. After initial diagnosis and treatment, patients would often be referred to a 24-hour (acute) care facility, but these programs can effectively divert persons from inpatient services who would, without it, be routinely admitted to acute inpatient programs. Diverted patients would generally be referred to day treatment, outpatient services or returned to the community. In rural areas, these programs may be provided in the emergency area of a general hospital through on-call mental health services.

B) **Crisis Intervention: Walk-in and Call-in Services**

Persons to Be Served

This program would serve anyone in the general community with a psychiatric concern or emergency, needing information about services or referral, needing advice about how to deal with someone else in a psychiatric emergency, etc.

Description of Services

This program would provide walk-in service at least five days per week from 8 a.m. to 5 p.m., or in an afternoon-evening shift, call-in services and be available 24 hours, seven days per week. This service would provide information and referral to all other components of the mental health system. In addition to classic (verbal) crisis intervention, other interventions might be provided.

C) **Mobile Crisis Service**

Persons to Be Served

This service is designed as a crisis intervention for persons experiencing an acute episode who are not appropriate for, or do not choose to participate in, hospital or other facility-based 24-hour emergency services. The service is for those who would benefit most from a treatment intervention in their usual living environment. The intervention may last as long as 48 hours, or be as short as a few hours.

Description of Services

The service provides 24-hour, 7-days-a-week mobile crisis capability to go to the home environment of a person in crisis and work intensively to resolve the situation without utilizing other emergency settings or 24-hour programs. Services would include, but not be limited to, crisis intervention, family work when appropriate, development of specific treatment plan, referral to other appropriate resources, and coordination of resources on a short-term basis. The service would be designed to maximize utilization of the home environment to achieve stabilization. It would

be staffed on a part-time "on-call" basis by staff in outpatient or other emergency services.

Standards

Per 100,000 Pop.	Est. # Patients Annually
A. Emergency Services Program	1000
B. 2.0 FTE, 10 units/da 8-5 pm./7 da.	1820
C. 150 visits/yr × 4 hr/visit × 2 professionals × $25/hr = $30,000	250

7. **Acute Day Treatment**

Persons to Be Served

This program should serve as an alternative to hospitalization for those who need a psychiatrically directed multi-disciplinary treatment program. The patients suitable for such a program have serious mental disorders reflected in a current or recent history of destructive behavior to self or others and/or are those who are unable to function in normal roles due to the severity of their handicap and who need help to mobilize themselves to acquire the rights and benefits needed for the ongoing reconstruction of their lives. Distress and anxiety immobilize these clients so they cannot even begin to gain control over their own basic living needs.

Description of Services

This is an intensive treatment function which would be used by persons living in their own homes or in transitional residential services, or other residential care settings. In order to function as a substitute for hospitalization by persons living in their homes or board and care homes, there must be a strong support system available to the individual.

This program must be staffed according to Title 9 regulations which include half-time physician supervision of the treatment program for all clientele.

This level of program is very appropriate for those children and youth who are unable to function satisfactorily throughout the entire day in their homes and also are frequently unable to conform their behavior well enough to attend regular school classes. The program should include an on-site educational component with teachers who have knowledge and experience in dealing with emotionally disturbed children or youth.

In sparsely populated areas, this function would probably not be provided in a separately identified program. It might be included with crisis residential services or with community support services. The mix of acute 24-hour care, crisis residential and day treatment will depend on local circumstances; these are particularly interdependent services.

Standard:

One Acute Day Treatment program per 100,000 (9 full-time equivalent staff including clerical) should be able to provide services to 30-40 persons at any time. This corresponds to the estimates of the persons in short-term crisis residential and transitional residential service programs who would be using the program.

8. **Outpatient Services**

Persons to Be Served

These are services for persons who require crisis intervention or sustained therapeutic intervention in accordance with a treatment plan, with goals and objectives arrived at in collaboration with the client. Clients will include persons with acute or moderate disruption of their mental functioning. They need professional assessment of the nature of their problems. Treatment plans will focus on individual growth and development, maintenance of functioning, resolution of serious family strife or gross problems in normal role functioning which interfere with the ability of the individual to carry on vocational, educational, or other daily responsibilities. Clients may require assistance in formulating the beneficial use of leisure time activities to combat isolation, loneliness, and to reverse regressive tendencies which have led to depression, isolation, etc. Some patients treated in this setting are so seriously disturbed that, without family or other social support, they might well require 24-hour care.

Description of Services

Short-Doyle mental health outpatient services should be accessible and responsive to the needs of the identified community target groups of all ages and ethnic, cultural, and sexual minority groups as well as the physically disabled outpatient programs include the following services:

A) **Brief individual psychotherapy** — adult and child: Diagnostic assessment and testing, brief individual psychotherapy to resolve situational or temporary problems.

B) **Longer term individual psychotherapy** for adults and children to successfully resolve crises and return to higher levels of functioning.

C) **Maintenance therapy:** Designed to support chronically mentally ill persons to maintain level of functioning. This will include time for interagency linkages and indirect treatment contacts.

D) **Information/assistance and referral:** Non-emergency triage service to the general public.

E) **Group therapy:** Adult/child-directed and focused, verbal/non-verbal therapeutic techniques designed to result in resolution or lessening of problems and/or behavior change.

F) **Couple/family/collateral/significant other therapies:** Designed on short-term and long-term basis to utilize the support system that the patient is involved with to assist in creating system and individual change.

G) **Medication therapy:** Prescription of appropriate psychotropic drugs, following the therapeutic response to and identification of side effects associated with the prescribed medication.

H) **Group activity therapy:** Occupational, recreational, and similar activities designed for persons in acute or extended phases of psychosis to facilitate interpersonal contacts in a non-traditional therapeutic activity. Such activities are usually combined with other therapeutic modalities.

I) **Outreach services:** Assessment and treatment for individuals or groups in a natural setting, including staff support to semi-independent living and satellite housing units.

Standard

The level of services needed would require 1 clinic per 100,000 population, with average staff of 20 FTE.

The staff should include a mix of psychiatrists, psychologists, and social workers according to Title 9 regulations as well as therapists with other training and skills. The staff skills, capacities, and characteristics of each clinic should be tailored to the needs of the population being served and should be adjusted to provide quality mental health treatment for client groups such as children and youth, older adults, chronically ill clients, racial and ethnic minorities, and the physically disabled.

9. **Case Management**

Persons to Be Served

Clients who should be served by a case management program include the following: all clients who have been admitted to local acute or State psychiatric hospitals two or more times within the past year; clients whose mental or emotional conditions have been diagnosed as chronic or who have had a continuous serious mental disorder for the previous five years; or any person who as a result of any evaluation has been determined to be incapable of appropriately utilizing available mental health resources or who has experienced gross interference with his or her ability to live independently in the community.

Description of Services

This function is intended to assure continuity of care within the system. It is a process of identification, assessment of need, planning, coordination, tracking and monitoring of continuing needs in the most efficient and effective way possible. The case manager must assess comprehensive needs of the clients, including housing and social services, and assure that services are developed by appropriate responsible agencies.

The comprehensive case management system shall be a distinct and identifiable function within the mental health system of each jurisdiction responsible to the local Mental Health Director, or the Director's designee, capable of assuming full responsibility for the assigned tasks and target population and with sufficient vested authority within the system to intervene efficiently and effectively on behalf of individuals in need.

It is essential that a patient who is receiving case management services is encouraged to be active in treatment planning. Another key factor in successful case management is the ongoing involvement of all members of the treatment team. Effective case management requires close coordination and communication among members of the treatment team. Major planning decisions and changes in a client's treatment plan should be made with the involvement of the client, his or her family, and the entire treatment team.

Standard

8.6 case managers + 2.6 support staff + operating expenses + tracking system.

This standard is derived as follows: There are approximately 400 long-term clients per 100,000 population who need case management services; there should be a caseload of 50 clients per staff member (8 FTE would be minimum for 400 clients but vacation and sick time require additional staff); support staff are added at 1.3 ratio. Patient tracking may be part-time staff in a small county or computer-based in a large county.

10. **Community Support Services**

Persons to Be Served

Clients served by Day Rehabilitation and Socialization Services would be the chronically mentally ill, with generally a long history of repeated hospitalizations and social withdrawal. These persons would generally have few skills of living or vocational skills and exhibit only marginal adjustment to living in the general community. These clients also have few or no community or familial support systems. They would typically be receiving continuing care services, and would deteriorate rapidly if left without a day rehabilitation program. Elderly persons would need to receive services appropriately modified according to reasonable expectations for their lifestyle.

Description of Services

These programs are designed to provide a range of therapeutic and rehabilitative services to persons in various settings including their own home or residential programs. They are less intensive than acute day treatment programs. The intent is to prevent recidivism and to maximize independent living. Treatment and rehabilitation services should be integrated as much as possible to meet client needs.

A) Day Rehabilitation Services

Provides counseling and social rehabilitation services for clients living in facilities with little or no treatment component. Ideally, this program should not be hospital-based, and be provided on an outpatient basis. When necessary, especially in sparsely populated areas without public transportation systems, patient transportation must be provided.

This program would have a functional orientation with pre-vocational and vocational services (rather than a "talk-therapy" approach). A pre-vocational service would focus o[illegible]itudinal, motivational, emotional and physical impediments to functioning. There is an emphasis on skill seeking and skill enhancement which would point toward vocational goals. These services should be available for those who live at residential facilities and those who live at home. The goal would be to maximally involve the client in meaningful and productive work. Some work experience would be permanently "sheltered" for those who have reached their level of vocational growth as well as being part of a continuum of care for those who can progress through the service toward independent functioning.

B) Socialization Services

These services are intended to develop the skills of normal social functioning in persons who are withdrawn and isolated. They will provide for socialization activities during the day, evening, and holidays. Parties, games, dancing, cooking as well as some amount of social group work, are appropriate services. The orientation would be toward the elderly and those living in board and care homes or semi-supervised housing. Activities should be gauged for multiple age groups and culturally appropriate. The standard is set to encourage the use of volunteers to enrich the program. Transportation often must be provided, especially in sparsely populated areas and for elderly or chronically disabled clients.

C) Services for Semi-Independent Living Programs

Staff will be required to provide structure and supervision for persons living in apartments or other housing without live-in staff. Assistance will be provided to assure the residents can handle shopping, food preparation and maintenance responsibilities as well as the problems of group living. One staff person is required for each 3-4 apartments (15 beds); it is anticipated most clients will move fairly quickly to totally independent living situations, but some may stay indefinitely, thus adding to the needed services.

D) Respite Care

This service provides relief for primary caregivers of persons who require 24-hour care and supervision because of psychiatric disability. The respite service would provide temporary coverage and supervision to enable family members or board/care administrators to leave the home for short or moderately extended periods of time. Respite personnel would assure the uninterrupted continuation of services provided for clients, both in the home and in the greater community. The purpose of respite

care is to prevent the necessity of removing the client from his/her home setting in order to continue to receive required levels of care.

E) Companion (Volunteer) Program

A volunteer-based companion program designed to encourage the development of relationships with residents of community care facilities with the goal of motivating and assisting residents to make a successful transition to independent living. The service would primarily be provided by volunteers, including students, who are supervised and coordinated by trained personnel, generally staff of the day rehabilitation or socialization programs. Services provided would include recreation, one-to-one companionship, advocacy, and assistance in developing the knowledge and use of community resources, including housing, vocational services. This service would also provide follow-up for persons who make the transition to independent living settings. This program could be based in the day rehabilitation or socialization program where staffing must include someone with special skill and experience working with volunteers in order to carry out these concepts.

Standards

A) Day Rehabilitation Services
9 FTE x 1.3 = 10.4 total staffing (including clerical support)

B) Socialization Services
2 FTE x 1.3 = 2.6 total staffing

C) Services to Semi-Independent Living Programs
1 FTE x 1.3 = 1.3 total staffing

D) Respite Care
1 FTE

E) Companion (Volunteer) Program
Included in A and B above

Total Community Support = 13 FTE + clerical support

11. Community Outreach Services (Consultation, Education, Information, Community Organization and Community Client Contact)

Community Outreach Services are an integral part of the spectrum of mental health services and must be carefully coordinated with the overall program administration. They enable the mental health system to reach the community-at-large, and provide a proactive way for the system to address the needs of those who do not or will not utilize traditional mental health services, especially populations at risk. An outreach approach also maximizes the effect of limited resources in sparsely populated areas.

The purposes of these services are (1) to enhance the mental health of the general population, (2) to prevent the onset of mental health problems in individuals and communities, (3) to assist those persons experiencing stress who are not reached by traditional mental health treatment services to obtain a more adaptive level of functioning, (4) strengthening individual's and communities' skills and abilities to cope with stressful life situations *before* the onset of such events, and (5) enhancing and/or expanding agencies' or organizations' mental health knowledge and skills in relation to the community-at-large, special population groups, or particular clients.

Particular emphasis should be given to addressing the needs of underserved populations such as children and youth, ethnic minorities, elders and residents of sparsely populated areas. Staffing patterns should include cultural, linguistic, and other special expertise as determined by target group(s). Staff should become aware of and sensitive to the unique life experiences and cultures of many minority clients which are related to lifestyles developed from the clients' experiences in living outside the dominant society. Clients' attitudes toward the mental health program and its staff may include distrust and inhibitions to self-disclosure. Such attitudes are likely to have a profound impact upon the development of rapport and to adversely affect therapeutic relationships. Appropriate responses will require sustained attention to the manner in which services are planned and provided.

Community Outreach Services should be organized with special attention to those public and private agencies which traditionally provide services to underserved minorities, poverty-level populations, elders, residents of sparsely populated areas, and those systems which serve children and youth — e.g., Child Protective Services Division of the Welfare Department, Probation Department (including Juvenile Halls), the schools, and Public Health. Since educational methods are often more easily integrated into existing belief systems, they can serve as the "entry" into the future provision of mental health services to fearful and suspicious communities. Care should be given to improving ways in which local communities can minimize those disruptive stresses which interfere with normal functioning. Information efforts can be used to reduce the stigma of mental illness so those who have been mentally disordered may have a better opportunity to

establish themselves in the mainstream of life.

Community Outreach Services are classified as Mental Health Promotion or Community Client Services, differentiating those activities directed toward promotion and primary prevention efforts from those activities directed toward assisting an individual or family who has a mental health problem or is at risk but who is not reached by the traditional treatment system.

The following functions should be provided in a mix appropriate to the planning area. About 50% of the total should be devoted to the needs of children and youth, both those at risk and those already dysfunctional.

A) Mental Health Consultation

The provision of culturally and linguistically appropriate technical assistance by a mental health professional to increase the mental health skills and improve the capabilities of allied caregivers or their agencies.

B) Mental Health Education (includes education about mental health, mental illness, and for mental health)

A learning process which imparts principles of sound personal and community health to other professionals, individuals or groups and/or the general public. The goals are to expand knowledge and skills, and to change behavior and emotional response by changing perceptions, attitudes and motivation and by teaching new personal and interpersonal skills.

C) Mental Health Information

Programs concerned with providing information about mental health services to the general community and/or particular target populations. Efforts to reduce the stigma of mental disorder are necessary to accomplish the Model goals of maximum normalization of lifestyle for who have been mentally disordered. The goal of these services is a community that is aware of its mental health resources, and of the factors that call for mental health intervention, and is comfortable in utilizing these services.

D) Community Organization

Working in collaboration with others, the staff member helps identify community mental health needs and objectives, locates appropriate resources, and initiates problem-solving action. The goals are development or modification of mental health, social, and other community systems to maximize mental health benefits in the community.

E) Outreach for Prevention (Community Client Contact)

Activities directed toward strengthening an individual's coping skills and abilities during a stressful life situation through short-term intervention. This intervention is used primarily for those who are at risk, and who, because of cultural, linguistic, or personal barriers, are not reached by the traditional treatment system. Clients are not designated as "patients," do not receive a diagnosis, and usually are not assessed for ability to pay. They often are seen in the home or in other settings where they feel more comfortable, or are reached through a telephone counseling line. They may be linked with ongoing treatment when appropriate after an initial relationship with the outreach staff member is developed.

Goals are provision of culturally and linguistically appropriate short-term mental health services to populations at risk and, when appropriate, linking with treatment services; and the prevention of more serious and costly mental health problems by early identification and timely crisis resolution.

Standard

A) 6 FTE (including para-professionals) per 100,000.

B) The staffing pattern must include cultural, linguistic, and other special expertise as determined by the area's population and target group(s). Staff must be trained in the methods used for Community Outreach Services.

12. Mental Health Advocacy

These are services to assist mentally disordered persons by helping them to help themselves to secure or upgrade services to which they are entitled and to protect and extend their rights. The advocate is, above all things, the personal representative of the client. The ability to function adequately, or within a range designated as normal, in a community setting is a major goal of the mental health system for its clients, thus it is a high priority to assist mentally disordered persons to regain or to maintain the management of their lives as concomitant to mental health. For these persons it is imperative that every effort be employed to enlist linguistic assistance when necessary from the community to assure they can understand the advocacy message. Advocacy has high priority as a cost-effective tool to further the overall goals of preventing chronicity and placing mentally disordered persons in the most non-restrictive settings. Many of the objectives of

advocacy programs are shared by the treatment system; each has a different role in accomplishing the objectives. For instance, while both the therapist and the advocate are helping the client to function independently, the therapist focuses on the intrapersonal factors and the advocate focuses on the system-related problems that interfere with the ability of clients to take control of their own destiny.

The following types of advocacy are encouraged, with the performance objectives shown as appropriate:

A) **Program or system advocacy:** Intervention on behalf of a group or category of mentally disordered persons by an approved advocate, in either a non-judicial or a judicial forum.

The performance objectives are:

To ensure that a list of all rights contained in the Title 9 Administrative Welfare and Institution Codes are posted in all facilities.

To ensure that all incoming clients are appropriately notified, verbally and in writing, in a language the patient understands, of their rights, and the client record is so noted.

To investigate complaints and to ensure that a clear written and published manner of registering a complaint is available to all clients and in a language that the client understands.

To collect data on denial of rights and provide summary written reports as appropriate and/or required to local and State bodies.

To participate in the planning, monitoring, and evaluating processes for mental health services at a local level and to represent the client's point of view in these processes.

To assist in training all mental health system personnel in the rights of patients and the relationship between self-determination and advocacy. Such training should stimulate mental health systems personnel to respect and enhance the dignity, self-worth and self-determination of all clients.

B) **Individual advocacy:** Intervention on behalf of an individual client by an approved advocate as the personal representative of that client.

The performance objectives are:

To assist the individual mental health system client or patient by supplying the tools required to exercise control over his or her destiny.

To investigate complaints by mental patients in licensed health, or community care facilities.

To collect data on the number and nature of complaints received and on complaints substantiated.

To monitor compliance with patient rights laws and regulations.

To act as a personal advocate for clients who are unable themselves to register a formal complaint.

To assist the client in obtaining maximum sustenance from the array of community services available by helping the client to create culturally and linguistically appropriate personal community support networks.

To act as an agent for the client only and wherever possible in response to the client's direction.

C) **Internal advocacy:** Intervention by an advocate working within the same system which provides services to the client.

D) **External advocacy:** Intervention by an advocate working outside the agency which provides services to the client.

Internal advocacy requires access to client records and considerable dexterity in distinguishing between the wishes and requirements of the client represented and the wishes and requirements of the the service provider. If this can be accomplished successfully, substantial strengths accumulate to the internal advocate position: familiarity with the specific agency framework, personnel, and policies plus ease of access to the client. External advocacy is generally essential when the client or the program requires legal representation by lawyers in or out of courts of law, or when internal advocacy is constrained.

Standard

Not less than .5 per 100,000.

Counties with small populations would be encouraged to share resources to develop independent advocacy services on a regional basis.

13. **Services to the Justice System - Adult and Juvenile**

Adults and juveniles under the jurisdiction of the justice system are a special population whose mental health needs must be addressed.

A) Mentally disordered persons who are picked up by the police may be evaluated and transferred to the appropriate mental health treatment setting if they meet the requirements of Section 4011.6 or 4011.8 of the Penal Code.

B) Those who are charged with crimes and are mentally disordered and present both a danger to the society at large and a security risk require very special attention.

C) Adults under the jurisdiction of the justice system due to the commission of a crime not related to a mental disorder may have concurrent psychiatric conditions and, thus, should have services from the mental health system.

D) Juveniles who are wards of the Juvenile Court and who have committed a crime that would be considered a crime had it been committed by an adult are held in a juvenile detention facility or kept on probation. There are also wards who are status offenders whose behavior is generally unacceptable to society for children, but whose behavior would not be considered criminal were they adults. At the present time these children are seldom incarcerated in a juvenile institution. Both groups of Juvenile Court wards require considerable services in the probation and mental health systems.

E) Dependents of the Juvenile Court are children who have been abused and/or neglected and present very special problems. They are generally under the care of a public social services agency and a very large percentage of them demonstrate emotional and behavioral problems which are a direct result of their life experiences to date. The availability of mental health intervention for these children is essential if we are to prevent extensive mental disorders and other tragedy for these children in the future.

Both adults and children involved with the justice system require special services, some because incarceration prohibits access to community services; some due to the special needs presented by these individuals. Some of these unique needs are brought about by the individual's use of crime or violence to express emotional problems.

The types of programs required are parallel to the total range of services presented above, 24-hour through community outreach services.

Where minority persons represent a significant number of the persons under the jurisdiction of the justice system, mental health staffing should be proportionately adjusted.

Standards for services to the justice system are presented on pages 34 and 35.

Examples of Activities and Methods in Delivery of Community Outreach Services

	Mental Health Promotion			Community Client Services	
	Community at Large	Special Pop. Groups	Agencies & Orgs.	Individuals & Families	Agencies & Orgs.
Consultation		Consultation with a group of law enforcement officers on how to handle their own stress. Consultation with a school around staff relationship problems.	Consultation with a group of law enforcement officers on understanding the dynamics of domestic violence. Consultation with a community agency to help them set up a program to address the problems of child abuse. Consultation with a school to help develop a mental health education program for students.		Case consultation with an agency which serves runaway adolescents. Case consultation with school personnel. Case consultation with juvenile probation officers.
Education	Media campaigns to promote mental health concepts such as coping with stress, mental health needs of the aging, etc. Workshops seminars on such topics as parenting skills, coping with losing a job, etc. Drama presentations on mental health concerns.	Workshop seminar on the emotional stress of being a new parent. Facilitating a self-help group for those who have recently become widows and widowers.	Training board & care home operators to develop programs for their residents. Training group home staff on signs of suicidal intent in adolescents.	See Community Client Contact below.	
Information	Brochure or slide presentation on mental health services available. Telephone information & referral on mental health services. Participation in health fairs.	Presentation on mental health services available to a group of nurses who make referrals on their jobs. Presentation to Medical Society on services available for chronic patients ready for release from inpatient treatment.	Dissemination of information to agencies or organizations on mental health services available. Presentation to a coalition of social service providers on new community residential treatment programs being developed.	Specific referral information to a person needing treatment services.	Specific referral information for an agency which needs to link one of its clients with treatment services.
Community Organization	Organizing the general community to support development of board & care homes.	Helping a Pacific Asian group develop funding resources for setting up mental health counseling services.	Participating with other human service agencies to develop services for victims of domestic violence. Serving on a board of an agency to provide policy input related to mental health.		Participating with staff from various agencies around the needs of a specific client.
Community Client Contact				Time-limited crisis intervention with an individual or family who just arrived in this country. Short-term counseling with a senior who is not willing to come into a clinic for mental health services. A suicide intervention contact on a telephone counseling line.	

STANDARDS FOR SERVICES: SUMMARIES OF LEVELS OF SERVICE

24-Hour Care Services Summary

Level of Service	Who's Served	Service Characteristics	Duration of Service	Where Provided	Minimum # Beds 100,000 Pop
1) 24-Hr Acute Intensive Care	Patients who are severely & acutely mentally disordered both voluntary and involuntary—marked by extreme impairments, intensive treatment required	Immediate, intensive round-the-clock, medically supervised treatment. Intended to restore a prior level of functioning	• Up to 30 days • Often less than 10 days	• Gen'l Hospital • PHF's • Augmented SNF's • Freestanding Psych. hosp	15 in gen'l or psych hosp & non-hospital. Local needs determine the balance between hosp & non-hospital. Based on 85% occupancy
2) Short-Term Crisis Residential Care	Clients who are undergoing acute situational crisis or severe stress reaction	Active social rehabilitation model intended to promote rapid restoration to prior level of functioning. Medic may not be required. Facility typically not locked. Usually also use day Rx program off site	10 days - two weeks	• Crisis house of CRTS • Specialized family care setting (e.g. S.W. Denver)	10 Beds
3) 24-Hour Transitional Care	Clients with impaired ability to cope due to severe emotional disturbances or mental disorder. Most appropriate 24-hr setting for children and youth	Programs intended to assist clients to move to less protective care or more independent functioning after an episode of acute care. Examples: Adolescent group homes, Adult halfway houses. Treatment svcs. are generally provided off-site	3 - 12 months, 6 months average	• Transitional residential care of CRTS • Psychiatric health facilities	10 Adult Transitional 10 Child & Adolescent Based on 90% occup
4) Long-Term Rehabilitative Care	Clients who are severely and permanently disabled & may be difficult to manage, due to serious mental disorders	Closely supervised and structured in-facility rehabilitation prog. intended to improve basic functioning. Emphasis on occup. rehabilitation therapy. In-house programming 12-16 hr da, 7 da wk	18 - 36 mos. av. 1 yr +	• SNF's with special treatment program • Long-Term Res Treatment prog. of CRTS • Augmented ICF	40 Beds Based on 95% occup
5) Out-of-Home Placement	Clients who are chronically disabled due to mental disorder	Provides for clients' basic needs & gen'l supervision. Includes respite care beds. Rehab and treatment provided through outpatient and community services	6 mos. +	In "normal" residential surroundings: Bd/Care Homes, Group Homes, SSI, SSA	60 Supervised Out-of-Home 15 Semi-Independent Living

Nonresidential Services Summary

Level of Service	Who's Served	Service Characteristics	Program/Facilities Required	# Persons Served Annually
6) Emergency Service & Evaluation	a) Eval, Treatment & Holding: Exhibiting acute symptoms, potentially violent/suicidal; includes drug induced psychosis	Primary intake services for acutely ill persons voluntary or involuntary. 7 day/week; 24 hours day; Diagnosis and medication, 24 hour holding capability	a) 1 Emergency Unit	1,000 persons yr 1,000 U/S
	b) Crisis Intervention: Any emergency or crisis in living	5 day/week, walk-in 24 hour, 7 day/week call in; information and referral	b) 2 FTE's	1,820 persons yr 1,820 U/S
	c) Mobile Crisis Service: as above	7 day, 24-hr field response	c) included in other programs	150 persons yr
7) Acute Day Treatment	• Severely disordered • Unable to function in normal roles • Residence may be in 24-hr care program or own home	Substitute for hospitalization; Intensive and multi-disciplinary; Title 9 regulation staffing; Half-time physician required; 3-6 months treatment	1 Acute Day Program 9 FTE staff (incl. clerical)	160 persons yr (30-40 at any given time.)
8) Outpatient Services	• Crisis or sustained therapeutic intervention • Moderate to severe disturbance • Should be accessible to all persons in target community	Assessment and testing; full spectrum of typical outpatient services including medication, should be tailored to meet special needs of population being served, including children, minorities	1 Clinic 20 FTE (average)	2,000 persons yr 16,250 U/S
9) Case Management	• Diagnosed as chronic • Continuous mental disorder: 5 yrs • 2 or more hospital admissions in prior year	Effecting continuity of care - identification, planning, monitoring, assurance of all necessary services, distinct & identifiable function.	8.6 Case Mgrs + 2.6 support staff + oper. expenses + tracking system	400 persons yr 4,800 U/S av. caseload: 50
10) Community Support Services	• Chronically ill; • Repeated hospitalizations; • Having few living, vocational skills, little familial support; socially isolated, withdrawn	a) Day Rehabilitation: Counseling, social rehabilitation, functional vocational & pre-vocational skill emphasis. b) Socialization Services: skills of daily living, development of social skills & support network. c) Semi-Independent Living Program: Assistance in independent daily living. Volunteers encouraged. d) *Respite Care* - permit maintenance in community by relief to caregivers.	a) 9 FTE 13 FTE + Cler b) 2 FTE c) 1 FTE d) 1 FTE	600 persons yr

System Support and Unique Services Summary

Level of Service	Who's Served	Service Characteristics	Program/Facilities Required
11) Community Outreach Services: Consultation, Education/Information, Community Organization, & Outreach, Community Client Contact	The general public and high risk groups, particularly: • Children, Youth • Cultural/Linguistic & other minorities	Cultural and linguistic appropriateness is essential in all these services Consultation: technical assistance to increase capabilities of caregivers and related agencies Education: to communities about mental health, mental illness, and for mental health. Information: about mental health & services to general & target communities. Efforts to reduce stigma of mental illness necessary to accomplish Model goals Community Organization: to secure public participation and support for mental health action Community Client Contact: aimed at alleviating problems of high risk group by taking services to the community.	6 FTE's (including para-professionals) with appropriate cultural/language expertise 6,000 "contact" hrs /yr
12) Mental Health Advocacy	Mentally disordered persons: clients	Assure client/staff understanding of rights. Investigate complaints. Intervene for individual clients or groups of clients; collect data on rights violations. Provide summary reports to local and state bodies.	Standard of 0.5 FTE/100,000
13) Services to the Justice System	Adults and juveniles under the jurisdiction of the Justice System	A full range of services, parallel to those outlined above, tailored to the local justice system	See Report on the Model for full details

Summary of Standards per 100,000 Population

Program Function	Program/Facilities Required	Estimated # Persons Served Annually (a)	Estimated Annual Units of Service	Estimated Cost per Unit of Service (b)	Adjusted Gross Cost (b)
1) 24-Hour Acute, Intensive Care (a) Hospital (b) Non-Hospital	13 Beds	310	4,654 days	$232 125	$ 714,500
2) Short-Term Crisis Residential	10 Beds	220	3,102	95	294,700
3) 24-Hour Transitional	20 Beds	40	6,570	75	492,750
4) Long-Term Rehabilitative Care	40 Beds	40	13,870	32	443,840
5) Out-of-Home Placement (a) Supervised Out-of-Home Placement (b) Semi-Independent Living	60 Beds 15 Beds	60 30	(Program costs included in Comm. Support & other Categories)		
				24-Hour Care Services Sub-Total	$1,945,790
6) Emergency Services A Eval. Trmt. & Holding B Crisis Intervention C Mobile Crisis	Emerg. Unit 2 F.T.E. (c) On-call	1,000 1,820 150	1,000 1,820 150 visits	$ 175 25 200	$ 175,000 48,750 30,000
7) Acute Day Treatment	9 F.T.E.(c)	160	7,000	50	350,000
8) Outpatient	20 F.T.E.(c)	2,000	16,250	50	812,500
9) Case Management	8.6 F.T.E.(c)	400	4,800	75	357,500
10) Community Support	13 F.T.E.(c)	600	n.a. (d)	n.a.	528,750
11) Community Outreach Services	6 F.T.E.(c)	n.a.	6,000 hrs.	50	292,500
12) M.H. Advocacy	.5-1 F.T.E.(c)	n.a.	n.a.	n.a.	18,750
13) Services to Justice System	n.a.	520	n.a.	n.a.	485,010
				Grand Total per 100,000 population (e)	$5,044,350

a) Persons will receive services in several programs, therefore this column will not yield unduplicated client count.
b) At 1979 rates. Administration costs are not included.
c) All full-time equivalents (FTE) refer to professional staff only.
d) n.a. = not applicable
e) Total excluding Services to Justice System = $4,559,540. Non-24 Hour subtotal, exclude Justice System = $2,613,750

Summary of Standards for Children and Youth Services*

Portions of the total model standard should be available for children and youth, but not necessarily in proportion to their proportion of the total population. The following assumptions governed the recommended allocation of resources.

1. Young Children should very rarely be hospitalized, and then only briefly for intensive evaluation and treatment planning. Most of the time, mentally disturbed youth should be treated in settings approximating as closely as possible a normal home setting. Those who are most seriously disturbed would be appropriately treated in transitional settings, most others would be in supervised out-of-home placement (specialized foster care and group homes). Altogether only 17% of the total 24-hour program capacity would be needed for children.

2. Community Outreach Services are of particular importance in assuring that the needs of high risk young people are identified and responded to appropriately.

3. The average 100,000 population would include approximately 29% children and youth.

Program Function	Total Model Standard	Children & Youth Standard	C/Y % of Total	Comments
1. 24-hr. Acute, Intensive Care	15 Beds	1.5 Beds	10%	This function may be developed on a regional basis
2. Short-Term Crisis Residential	10 Beds	3 Beds	30%	Specialized, trained foster homes can provide this service. Need not be regional.
3. 24-Hr. Transitional	20 Beds	10 Beds	50%	Appropriate for many severly disturbed C.Y. with necessary adjunctive service
4. Long-Term Rehabilitative Care	40 Beds	4 Beds	10%	Many will be in foster homes but not part of mental health system, the capacity of such settings is not included here
5. Out-of-Home Placement				
a) Out-of-Home Placement	60 Beds	6 beds	10%	
b) Semi-Indep. Living	15 Beds	3 beds	20%	For emancipated youth.
6. Emergency Crisis	2 FTE + Emergency Unit	0.5 FTE	25% of Crisis Intervention	Use of emergency services varies considerably according to localities
7. Acute Day Treatment	9 FTE	1 FTE	10%	
8. Outpatient Services	20 FTE	5 FTE	25%	C.Y would use these proportionately to their % of population.
9. Case Management	8 FTE	2 FTE	25%	C/Y would use these proportionately to their % of population.
10. Community Support	13 FTE	2 FTE	25 % of day rehab. services	C.Y use about 25% of Day Rehabilitation services but not socialization.
11. Community Outreach Services	6 FTE	3 FTE	50%	These programs are essential to meet the needs of C.Y.
12. Mental Health Advocacy				No separate standard is included although it is important that advocates include attention to all C.Y programs within their domain.
13. Services for Mentally Disordered Wards and Dependents of the Juvenile Court				Separately described, there may be considerable variation in the level of services needed for this category according to differing local judicial practices.
Total Cost of Model C/Y Programs: $1,229,510 (including #13)				
Total C/Y Program as % of Total Model Cost: 29%				

*Current figures do not reflect potential impact of Social Services Redesign.

Summary of Standards for Geriatric Services*

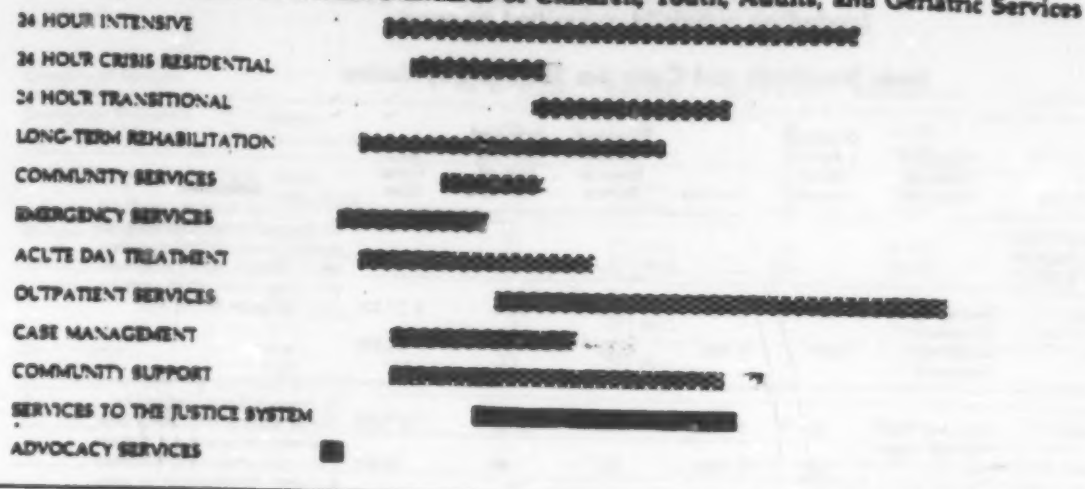
Most studies show the incidence of mental disorder among the elderly exceeds that for the general adult population. Nevertheless, the elderly tend not to seek mental health services and special considerations should guide the development of services to meet their needs. The following assumptions governed the recommended allocation of the total resources.

1. Inadequate diagnosis and treatment of elderly mentally disordered persons have resulted in inferior care for many.
2. Specially trained personnel should be available to provide assessment, diagnosis and treatment planning on a mobile basis to the elderly in their own homes or in health care institutions.
3. The mobile geriatric team would provide consultation and training in all 24-hour and day care settings serving the elderly to assure the development of appropriate treatment programs. The team would provide case management as well as program consultation and liaison between services.
4. The average 100,000 population would include approximately 10% (10,000) persons over age 65.

Program Function	Total Model Standard	Geriatric Standard	Ger. % of Total	Comments
1. 24-Hour Acute Intensive Care	15 Beds	2 Beds	13%	Need not be located in a hospital. In sparsely populated areas, these should be included in adult acute care services; in urban areas, specialized psychogeriatric programs could be developed in appropriately augmented health care settings (e.g. General Hospital, SNF).
2. Short-Term Crisis Residential Care	10 Beds	1 Bed	10%	The elderly may require longer stay than adult clients.
3. 24-Hr. Transitional	20 Beds	1 Bed	5%	Facilities should not exclude elderly clients who meet other admission criteria.
4. Long-Term Rehab. Care	60 Beds	6 Beds	10%	May need to be regionalized in order to provide the necessary special programs.
5. Out-of-Home Placement a) Supervised b) Semi-Independent Living	 60 Beds 15 Beds	 6 Beds 1.5 Beds	 10% 10%	Should be specially designated to assure availability to the elderly, not necessarily age-segregated facilities.
6. Emergency Services	24-Hr. availability	Mobile Team 3.5 FTE 100,000 5 FTE for each additional 100,000	10% of units	Multidisciplinary team should be available for combined emergency screening, outpatient and case mgmt. functions.
7. Acute Day Treatment	9 FTE 10,400 U/S	Included in Std.	10% of units	Programs should be [illegible]med to be able to include geriatric pa[illegible]
8. Outpatient	20 FTE 16,250 U/S	1 FTE	5% of units	Specially trained persons should be included in staffing pattern and work closely with mobile team.
9. Case Management	8.6 FTE 400 caseload (pt. of mobile team)	6 FTE caseload: 30-40 short-term & 30-40 long-term		Elderly clients would require additional services, especially those living alone and at risk of institutionalization.
10. Community Support a) Day Rehabilitation b) Socialization c) Svc. for Semi-Indep. Living	13 FTE	Included in Mobile geriatric Team		Special geriatric consultant would help to assure regular programs meet needs of geriatric clients.
11. Community Outreach Services	6 FTE	Included in Mobile geriatric Team	n.a.	Full staffing of mobile team would enhance linkages of mental health and other community programs for the elderly.
12. Advocacy	.5 to 1.0 FTE	No separate Standard	Not age-specific	Regional efforts may be desirable to provide non-age specific advocacy functions adequately.

N.B. Mobile team is drawn from the elderly populations' share of emergency, outpatient, case management and community services staffing.
*Based on the Position Paper of the Geriatric Committee of the Conference of Local Mental Health Directors. For fuller exposition, please refer to that Paper.

Summary of California Model Standards of Children, Youth, Adults, and Geriatric Services



Services to Justice System
Forensic Mental Health (Adult)
(excluding judicially committed persons)

Basic Standards and Costs per 100,000 Population

A. Service in Jail	Programs/ Facilities Required	Estimated # Persons Served Annually	Duration	Estimated Annual Units of Service	Estimated Cost Per Unit of Service	Adj. Gross Cost	Comments
1 Emergency Evaluation & Triage (evaluation including 4011 & P.C.)							To triage all inmates entering jail to refer inmate for further screening to identify mental disorders, give crisis intervention until referral for outpt. under A-2
a) Female	Emergency Evaluation	364	1 visit	364	$ 75	$ 27,300	
b) Male	Emergency Evaluation	1,274	1 visit	1,274	75	95,550	
2 Outpatient							To provide Court, and self or Sheriff referred evaluation; brief treatment; diversion out of criminal justice, avoid hospitalization & reduce deterioration of mentally ill in jail.
a) Female	Crisis Intervention and Treatment	35	5 visits	175	$ 40	$ 7,000	
b) Male		65	5 visits	325	40	13,000	
		100					
B. Service in Community							
1 24-hr Acute Intensive Care-Hospital (4011 & 8 P.C.)	1.5 Bed	36	14 days	504	$ 200	$ 100,800	To provide evaluation & short-term tx. to inmates meeting inpt. criteria and to those with serious risk which would have to be treated in a secured facility (inside or outside of jail)
2 24-hr Transitional Care (4011.8 P.C.)*	1 Bed	7	45-90 days	420	$ 50	$ 21,000	Pt. under dual jurisdiction of criminal justice & mental health systems requiring less intensive (more intermediate Rx) remaining under dual jurisdiction.
3 Long Term Rehabilitative Care*	7 Beds	2	120 days	240	$110	$ 26,400	Pts. are referred primarily from the services described above to receive long term soc. & reh. services toward non-recidival & independent functioning in community.
4 Case Management		67	6-12 months (12 visits)	804	$ 40	$ 32,160	Tracking, linkage, monitoring, procure & aftercare of patient either still under dual jurisdiction or release therefrom
			TOTAL COST PER 100,000 POPULATION (1979 BASE):			$323,210	

Only for persons under the dual jurisdiction of the Court and Mental Health Systems.
* One third of Service Category B-1, ⅓ of B-2 and ½ of B-3 should be in a secured facility

Services for Mentally Disordered Wards and Dependents of Juvenile Court

Category of Services		Est. Annual No. of Patients	Duration	Cost Per Unit	Subtotal Cost	Total Cost
Emergency Evaluation and Triage	Wards	156	1 visit	$ 75	11,700	
	Dependents	62	1 visit	75	4,650	$16,350
24-Hour Acute Intensive Care	Wards	.8	30 days	250	6,000	
	Dependents	.3	30 days	250	2,250	8,250
24-Hour Transitional Care	Wards	.75	275 days	110	22,687	
	Dependents	.75	275 days	110	22,687	45,375
Long-Term Rehabilitation	Wards	.5	375 days	30*	5,625	
	Dependents	.5	375 days	30*	5,625	11,250
Day Treatment	Wards	.25	375 days	50	4,687	
	Dependents	.25	375 days	50	4,687	9,375
Outpatient & Case Mgmt	Wards & Dependents	100	20 units	50	100,000	100,000
					Total Cost per 100,000 population:	$190,600
					Services to Justice Systems (Adult and Youth) Combined Total:	$488,810

*Treatment Costs Only

METHODOLOGY FOR DEVELOPMENT OF THE MODEL

This Model is based on expert judgment regarding the necessary components for a sound community mental health program. It avoids both the extremes of accepting what is judged to be unacceptably low levels of care and of overstating need in a fantasy "wish list" approach.

Resource standards are generally established by the following methods; for each the applicability of the method to the California Model is briefly described.

A. **Comparative Standards:** Data are presented below which show that the proposed standards are within the range of existing resource patterns in other states and catchment areas, but this model emphasizes the use of residential programs, with community support and outpatient services, to maximize normal lifestyle and minimize restraints for persons served by the system. This emphasis is consistent with the prevailing community mental health value systems and ideology in California.

B. **Historical Standards:** Resource standards based on past performance do not adequately project the impact of changing standards of practice in the field. They should not be used to set a new standard but should be used to guide the projection of resources needed on a year-by-year basis to reach the "standard" level.

C. **Normative Standards:** This method was selected by the Legislative Work Group because it best facilitates a changing program emphasis. The experts who rated the necessary standards were persons responsible for planning, organization and delivery of public and private mental health programs throughout California.

The usual specific techniques of needs assessment such as community-based information gathering, services-utilization analysis and use of social indicators as predictors of need have all been considered to the extent possible and appropriate in arriving at the recommended standards and levels.

Unfortunately, the data base necessary to scientifically establish such a model is not as extensive as we would wish. There are few, if any, places where an adequate community mental health system can be said to provide services to a similarly delimited target group and which incorporate the desired non-institutional approach which maximizes normal lifestyle, quality of life for clients and minimal restrictions. Without a measurable "test" situation to apply to other areas, the usual method used to gauge what "ought" to be is the judgment of experts.

It should be emphasized that the standards apply only to that sector of the population which is served by the Community Mental Health system. The current standards should not in any way be construed as applicable to the entire population of a county or of the State. The percentage of the population which obtains its care outside of publicly funded programs varies from county to county.

Emphasis was given to the experience of those counties where there is judged to be a "successful" program which met the criteria of an efficient, but non-stressed system, with general community acceptance of the available services.

The specialized requirements of prevention, minorities, sparsely populated areas, children's and geriatric services have been addressed by separate committees and their reports have been incorporated in the total Model. At this time, no quantitative changes in the proposed total standard are required to incorporate those specific target groups. The Model categories are mutually compatible with these reports.

The most controversial aspects of the proposed service levels involve 1) reduction of current acute inpatient service patterns in many programs 2) general increase in overall budget.

1. Evidence from a number of counties shows they are able to adequately serve crisis stabilization, acute treatment, transitional treatment and long-term rehabilitative needs within the total 24-hour resource standards of the Model. Counties with higher levels of acute 24-hour utilization are generally marked by the absence of transitional and long-term rehabilitative programs. They also tend to have high rates of involuntary hospitalization.

   A manual on State Mental Health Planning, published in 1977 by the National Institute of Mental Health, cites a range of 20-375 psychiatric beds per 100,000 population in current plans; 50-100 beds per 100,000 are most frequently chosen. The proposed model calls for a total of 55 beds in what would correspond to a range of *licensed health* facilities including general hospitals, free-standing psychiatric hospitals, psychiatric health facilities and skilled nursing facilities. This is clearly within the range of current planning practice. (Not all *need* be provided in licensed health facilities, many of

the Long-Term Rehabilitative should be in less institutional settings.)

Short-Term Crisis Residential Care, Transitional* Out-of-Home Placement and Semi-Independent Living standards call for another 105 beds in non-licensed or community-care licensed programs.

The usual criticism of the Hill-Burton approach to planning for resources is that one cannot plan for inpatient resources in a vacuum: utilization is most heavily influenced by the availability, accessibility and acceptability of other resources. Such problems are very evident when the available resources in California are examined in comparison with the Model: there are marked shortfalls in other than acute hospital 24-hour resources.

Total California service patterns, including public and private sectors, have been:

A) Licensed capacity

Acute hospital beds in general hospital and free-standing psychiatric hospitals:	32/100,000
Acute State hospital beds:	31/100,000
Total =	63/100,000

(This excludes VA beds; also note that State hospital beds do not all provide acute care though they have been so licensed. It also includes all public and private facilities.)

*Transitional services would preferably be in community-care licensed facilities, but could be in health facilities.

B) Utilization (from OSHPD, State Plan for Health, Chapter IX)

"Acute" beds total public and private	24/100,000
Long term: (excluding supervised out-of-home placements, semi-independent living)	
Total =	56/100,000

"Acute" defined by stay in SH less than 30 days and other local acute hospitalizations. (This is probably an over estimate of true need in acute care.) Short-Doyle and State hospital acute bed utilization (Approx): 6/100,000

C) Other States' Utilization (from A Manual for State Mental Health Planning)

a) Maryland Short-term psychiatric beds: 00/100,000

b) Virginia Current use: 150/100,000 - all types
Proposed standards: 90/100,000

c) West Virginia Long-term beds, standards: 100/100,000
Other alternative beds: 100/100,000
Halfway house beds: 10/100,000

d) S.W. Denver Acute care beds, hospitals: 1/100,000

It is clear that the California proposal is not at either extreme for 24-hour services, although it is projected that recent patterns of acute hospital care can be reduced if other transitional and rehabilitative services are established.

2. It has been known for years that there are needs beyond the immediate crises served by some form of 24-hour and emergency intervention. No one in the field has been satisfied with the level of rehabilitation and independence achieved by persons who were once hospitalized; no one has been satisfied with large numbers in board and care or skilled nursing facilities without support and treatment services. The community problems created by the large number of persons who have been deinstitutionalized will not disappear with further reduction in 24-hour services; in fact, as the criteria for admission to hospitals are tightened further, the need for community support and systems which prevent hospitalization will be even more marked. Thus, it should not be surprising that there is evidence of a need to expand services.

If no community service programs had been implemented, and State hospital services were provided at the same level as their peak in 1957, the total program cost in 1979 dollars would be approximately $1.3 billion with *no adjustment for population growth*. Even discounting the maximum level to account for the impact of psychotropic medication, and calculation based on the usage of 1963-64, the State hospital equivalent cost would be $1.1 billion. Yet no one would judge that the old State hospital system was an adequately effective system of mental health care.

Beyond the equivalent services to chronically and severely disturbed persons, shifted from State hospitals to the range of community services, the Model includes a large amount of services which ameliorate stress and crises, community interventions, support to schools and other social institutions, etc. These are now recognized as necessary elements of a community mental health program which extends the program support to all sectors of the community-at-large. This Model provides for the dependent client population formerly treated only in State hospitals in a more effective and acceptable way and also provides for a range of community services within the comparable costs of what the State hospitals would have required. This is clearly an indication of the real cost-effectiveness of this proposed model program.

Relationship of the Model to the Fee-For-Service Medi-Cal System

Integration of the administration of fee-for-service Medi-Cal (FFS M-C) with the Short-Doyle system should be considered after the model Short-Doyle system has been developed and implemented. These resources are specifically not included in the standard levels at this time, for the reasons which follow, although in theory both systems should be serving the same community needs, thus both should eventually be included in assessing resources and unmet needs. FFS M-C is not included now because:

1. There is great variability between counties in the availability of fee-for-service providers.
2. There is now no mechanism or structure to manage FFS M-C so that the resources could be integrated into a closed-end appropriation system such as Short-Doyle. Until such mechanisms are provided legislatively, there can be no meaningful way to include the FFS Medi-Cal as contributing to the provision of "standard" services for a community. If under control of the local mental health Director, FFS Medi-Cal resources could be integrated into the Model standards. The extent to which the standard levels would have to be adjusted should be determined at that time.
3. There is evidence that FFS M-C currently often serves a different population, with different characteristics and needs, than the Short-Doyle system. Pressures of insufficient resources have forced the Short-Doyle system to reduce services to less severely disabled persons, to reduce inpatient lengths of stay, and to curtail personal growth-oriented programs. Further, Short-Doyle Medi-Cal now provides some services not available through the FFS M-C system, such as day treatment. Uniformity of "benefits" provided by the Model system is a fundamental concept.

IMPLEMENTATION RECOMMENDATIONS

1. **Administration of the Model Program**

The system should be a high-quality, decentralized, service delivery system under local administration pursuant to the ongoing administrative provisions of the Short-Doyle Act. Accordingly, the State should ultimately divest itself of direct service administration, although it is anticipated that some State service capacity will be necessary for a small population of Penal Code offenders who require intensive security, and possibly for other specialized, difficult groups of clients. It is essential, however, that the comprehensive range of locally administered programs be developed before State hospitals are further reduced. The continued reduced availability of programs in State hospitals, without compensatory local programs ready to operate, is having a markedly negative effect on many local communities.

2. **Roles of State and Counties in Implementing the Model Program**

The State Department of Mental Health responsibilities in the Short-Doyle system should be:

a. Setting of statewide policy and standards;

b. Allocation of funds;

c. Monitoring of compliance of programs with statewide standards;

d. Information gathering and exchange;

e. Coordinating regional planning among counties for some services;

f. Planning for and ensuring an adequate level of manpower development and training;

g. Liaison with other State and Federal agencies; and

h. Statewide planning, working toward a unified plan for Short-Doyle and C.M.H.C.s and assuring compatibility with O.S.H.P.D. and Title XIX plans.

In order to minimize the State's conflicts with its regulatory role, it is recommended that wherever feasible the State divest itself of direct service responsibilities. However, to assure stable, quality care it is further recommended that before any particular change is made the feasibility of providing any State services under alternative auspices should be clearly established and tested. The counties' responsibilities in the Short-Doyle system should be:

a. Planning services;

b. Developing services;

c. Delivering services;

d. Identifying services best provided regionally and working with other local mental health authorities to implement regional programs;

e. Coordinating with other health and human services systems;

f. Evaluating services; and

g. Providing local management/administrative services and educational/training services.

A statement of legislative intent should note that counties are the primary service delivery resources in the system, and that they may provide services through contracts or directly. As stated in existing legislation, there should be a commitment to contract for services when available and of equal quality. The systemwide goal of decentralized, localized service delivery authority should be reemphasized.

The County Short-Doyle Plan should remain the vehicle whereby the County develops the strategy for implementation of the Model. The County is expected to plan service location, staffing, and target group considerations within the Model standards to assure appropriate accessibility, availability, acceptability and quality of the services provided.

3. **Relationships of the Community Residential Treatment System (CRTS) to the Proposed Model**

The CRTS programs are included within the Model program elements. They are explicitly called forth in the appropriate categories and included as a vital and important part of this comprehensive community mental health program. Where the Model program includes the CRTS programs (e.g., Short-term Crisis Residential, Transitional and Long-term Rehabilitation) it is recommended that the program review procedures established by AB 3052 be used, with the proviso that each County would receive its share of resources for each standard category. In practice, this would mean double review of those portions of the County Plan which refer to the CRTS-linked categories of the Model; i.e., the regular Departmental review plus the CRTS Advisory Committee review.

4. **Assuring the Comprehensive Range of Services**

The Short-Doyle system has thus far not mandated any particular set of programs nor amounts of programs to be provided. Equitable availability and accessibility to all State residents requires that standards be adopted and programs funded accordingly. It is proposed that after a phase-in period (the length of which is necessarily contingent upon the expression of legislative intent to develop the Model program) counties would be limited to the standard budget amounts required for each program category. Variance from the basic standard for each service category should be allowed to cover local planning considerations so long as the total remained the same and there is an acceptable rationale for the variance.

Deviation in the direction of less restrictive 24-hour services, within the framework of the Model, would also be permitted if appropriately justified by local needs, population characteristics and other available resources.

The accompanying table shows the statewide status of implementation of the Model and highlights the major deficiency in acute non-hospital, transitional and community support services.

A particular planning problem is posed by those services which a County is operating in excess of the standard level. Counties in which this situation exists should be required to address clearly the steps they will take to reduce excess programs as they plan to implement the Model. In some counties, there is an excess of acute or long-term care beds but a corresponding absence of non-hospital alternatives. Duplicate funding will be required during sufficient time to permit development of the missing or insufficient system elements — the necessary duplicate funding time would vary according to the type of programs which are to be developed. Counties would be expected to move toward the Model program levels in a system-oriented way which would incorporate all program elements each year. They should not be permitted to develop any one category in isolation; rather there should be gradual increments in all "shortage" categories until the standard level is reached; similarly, there should be gradual complementary reduction in the "surplus" categories. It should, however, be noted that facility acquisition and other system considerations could make it cost-ineffective to require such shifts. Where this is the case, the County should be permitted to justify its continuation of existing services.

5. **Anticipated Time and Resources Required to Implement the Model**

The accompanying tables summarize the potential State general fund requirements to implement the model. New net State funds would be $242,000,000 (in 1979 dollars) when adjustments are made for the reductions in certain categories that would be required. In overall State budget terms, this is a small fraction of the total State resources. The investment of these funds would, however, yield a rich reward in sound community mental health programming.

The most difficult planning task inherent in implementation is the development of residential programs, which is proving to be increasingly difficult due to factors such as spiraling housing costs, lengthy procedures to obtain certificate of need, licensing and zoning approvals, etc. It has become evident that a potential provider must have guaranteed ongoing funding in order to invest in the heavy startup costs for these programs. A special reserve fund is recommended to facilitate the development of the Model program. The reserve would cover the necessary "duplication" funding and would be needed only during the planned phase-in period.

A 5-year phase-in is recommended; most counties would have no trouble meeting the standard levels in all categories within that time, but some of the larger ones may find that a difficult target date. Each year of the phase-in period must include at least a proportionate increase in resources: 1/3 to 1/4 of the needed increase is necessary to achieve a completely balanced system at the end of 5 years. A larger increase in the early years would be necessary if all the residential programs were to be established in time to meet the 5-year target. It is recommended that the deficit in 24-hour program categories ($187 million) be made up in 4 years (at $46.8 million per year) and the deficit in non-24-hour categories ($187 million) be made up in 3 years (at $62 million per year). Thus, the first year would require commitment of $111 million, but a major part of the funds (about $50 million-$60 million) should be placed in a "reserve" account since program startup would take most of the year and the programs would not be fully operational until into the second year. Any augmentation less than $111 million essentially delays the time period for full implementation of the Model.

Even in favorable economic circumstances it would take a major financial commitment to implement this program. In the present circumstances, the prospects of making progress may be very limited, but it is still very important that there be a clear statement of policy objectives against which priorities can be assessed. This is one significant function the Model serves now.

Short-Doyle
Comparison of Adjusted Gross Cost and State General Funds for Standard with Existing and Additional State General Fund Needs
Fiscal Year 1979-80

	STANDARD[1]					
	Adjusted Gross Cost	Percent State General Fund[2]	State General Fund	Estimated Existing State General Fund	Add'l State General Fund to Meet Standard	Total State General Fund Needs
I. Intramural	$404,655,138	82.4	$297,211,268	$200,777,170	$ 96,434,078	$402,860,938
A. Acute 24-Hour Hospital	65,660,640	72.7	47,735,285	90,496,971	(42,761,686)[5]	90,496,971
B. Acute 24-Hour Non-Hospital	97,295,250	84.7	82,409,077	8,923,165	73,485,932	82,409,077
C. Transitional 24-Hour Care	140,478,000	82.9	116,456,262	24,062,554	92,393,708	116,456,262
D. Long-Term Rehabilitative Care	101,221,268	50.0	50,610,624	77,294,500	(26,683,876)[6]	113,498,622
II. Out-of-Home Placement and Semi-Independent Living	85,605,442[3]	26.2	22,376,226[4]	989,574	21,386,652	22,376,226
III. Outpatient Day Treatment	260,835,611	85	223,000,000	116,880,000	73,790,832	190,670,832
IV. Extramural Community Support	176,074,422	100	176,000,000	99,628,600	98,838,380	158,466,980
V. Extramural Community Services	42,760,875	100	43,000,000	33,120,000	5,364,788	38,484,788
VI. Training Manpower Development	17,104,350	100	17,000,000	5,045,600	9,493,098	14,538,698
Total	$986,835,836		$778,000,000	$416,460,944	$362,800,000	$827,389,662

[1] Excludes state and local medical commitment programs.
[2] Excludes fee for service Medi-Cal.
[3] Includes $15/day Life Support.
[4] Includes only $5/day Special Treatment Program.
[5] Funding of $42,761,686 in state general funds required to maintain the current program.
[6] Additional funding of $36,204,128 required to meet units of service standard, and funding of $26,683,876 in state general funds required to maintain the current program.

Estimate of Added Funds Needed Statewide to Implement the Model: Duplicate Transition Funds $120m, New State General Funds $362m.

Note: These categories are combined in slightly different ways than the basic model to permit comparison with available program data.

State of California Department of Mental Health, Analysis and Information Section, October 4, 1979, Rev. October 18, 1979.

Projection of Resources Development
Statewide Total
All Target Groups
Fiscal Year 1981-82

Service Program Type	Present Program Level		Target
	Cost	Number of Beds	Number of Beds
ACUTE STATE HOSPITAL (24 HOUR)	$ 97,912,110	2,476.42	1,176.53
ACUTE LOCAL HOSPITAL (24 HOUR)	101,232,774	1,343.35	1,295.54
ACUTE LOCAL NON-HOSPITAL (24 HOUR)	14,710,498	539.32	2,903.66
NON-ACUTE (24 HOUR)	60,686,418	2,648.10	10,593.88
	Cost	**Units**	**Units**
EMERGENCY SERVICES	$ 35,303,989	344,834.00	371,340.00
OUT-PATIENT	128,185,102	2,245,728.00	3,501,266.00
PARTIAL DAY	62,423,834	1,254,134.00	4,172,447.00
	Cost	**Caseload**	**Caseload**
CASE MANAGEMENT	$ 24,712,309	30,693.00	79,128.00
	Cost	**Full Time Equivalent**	**Full Time Equivalent**
PREVENTION CONSULTATION AND EDUCATION	$ 34,283,282	917.06	1,787.60

Source: California Department of Mental Health, Statistics and Data Retrieval Section 1/82

Estimated Total Need for Mental Health Services and Generalized Pattern of Service Provision

The Role of Fee-for-Service MediCal, Private Sector Care and Short-Doyle According to the California Model[1]

Estimated Persons[1] for each level of Need per 100,000 Population	Fee for Service MediCal Services	Short-Doyle Services According to the California Model	Private Sector Services	Persons Not Served or Served Elsewhere	Past Service[1] Experience
HIGH NEED: TOTAL = 2,600 persons/100,000					
a) Acute Care[2]	Acute hospital: 155 persons 100,000 (average of 1977 and 1979 M-C utilization rates 183 and 127 respectively)	24-hr Acute, Intensive:[3] 310 persons 100,000 Short Term Crisis: 220 persons 100,000 Emerg Holding (50%) 500 persons 100,000	Acute hospital: 157-375 persons 100,000 (if reduced av. length of stay to Statewide av., private sector could serve more than twice present # persons: p 473)	Intensive Care Svcs to Justice System clients would fall in the High Need Group: 145 persons 100,000 VA = 66 100,000 Not Served = 240	1977 data (p 465 State Health Plan) 783 100,000 received hospital care 131 - State Hospital 66 - VA 183 - FFS M C 266 - Short-Doyle 157 - Private (Est. from p 475 465) In addition, 156 100,000 received "partial hosp care" 169/100,000 received "extended care" 53 100,000 received non-hosp resid serv
b) Extended Care	SNF's: 29/100,000 (1977 util., p 465 of State Health Plan)	Acute Day Treatment: 160 persons 100,000 Transitional Care: 40 persons 100,000 Long-Term Rehab 40 persons 100,000 Out-of-Home Placmt 90 persons 100,000 Community Support & Case Mgmt Svcs are also directed to these persons.			
Subtotal = 2,370	184 8%	1,360[3] 57%	375 16%	451 19%	1,141
MODERATE NEED: TOTAL = 9,800 persons/100,000					
	Outpatient/Clinic Services 1,338 persons 100,000 (Based on MediCal svcs from psychiatrists, psychologists, clncs & hosp outpatients. Persons seen in hosp deducted from the user total since these are counted in high need group. Net users = 221,792 (State total.)	Outpatient Services 2,000 100,000 Emergency Svcs (50%) 500 persons 100,000 Crisis Intervention 1,820 persons 100,000	Private Practice Services 2,040 persons 100,000 (Total licensed providers = 7,431, or 34 per 100,000, p 495) Estimate based on 60 persons per provider	2,058 Includes those who refuse treatment, find it inaccessible or unacceptable, those who do not recognize their need for svcs, and those who are treated in the general medical system	1977 data: State Health Plan 3,856 100,000 received outpatient services 2,007 - Short-Doyle 921 - FFS M C 927 - Private Practice
Subtotal = 9,756	1,338 14%	4,320 44% Includes duplicate count within these services as well as duplication of those referred to private sector therefore there is residual unmet need according to these estimates	2,040 21%	2,058 21% (See page 463, State Health Plan)	

Chart continued on next page

Chart continued from previous page

Estimated Persons[1] for each level of Need per 100,000 Population	Fee for Service MediCal Services	Short-Doyle Services According to the California Model	Private Sector Services	Persons Not Served or Served Elsewhere	Past Service[2] Experience
LOW NEED TOTAL = 27,500 persons/100,000					
	Not reported in psychiatric svcs., probably a large part of general medical care. Kaiser & other studies show that mental health svcs. may reduce "high medical users" level of general medical treatment.	Community Services: 6,000 hours 100,000. It is assumed these svcs. are provided in ways which can affect large numbers of community residents. The Model standard may need to be increased when better estimates are available of the other svcs which can address this need.	No estimate is possible at this time.	Cost effective interventions are often provided outside the mental health system: e.g., • pastoral counseling • marriage, family counseling • community education (e.g., stress seminars, parenting courses, etc.) A large portion of this group (60% or more) are treated in the general medical system.	No available data

[1]Estimates of the number of persons needing services by level of need are derived from the Warheit factors applied to total population. Correspondingly estimates of services needed are provided according to the number of persons to be served, not costs or units of service.

[2]The share of services looks very different when units of service are compared. For example in 1977, FFS M.C. accounted for 23% of days and 35% of discharges, private sector accounted for 47% of days and 20% of discharges, and Short-Doyle was 31% of days and 46% of discharges. Looking only at acute hospital care, the pattern presented is: 18% of persons served by FFS M.C., 37% by Short-Doyle, and 45% by private sector.

[3]Current use pattern of Short-Doyle + State Hospital = 377/100,000 receive hospital services. Projected hospital use of 310/100,000 represents reduction of 18%.

[4]Description of actual utilization and service patterns are derived from the *California State Health Plan 1980-1985* and 1979 FFS MediCal summary data (California Department of Health, 01/06/81).

General Note: The application of this generalized service pattern should be revised for each target area to reflect the specific age, sex, and ethnic composition of the area when factors are available for all segments of the population. Likewise, there may be changes in the private sector share of the total according to changes which may develop in insurance coverage, HMO enrollment, changing FFS M.C. regulations, etc. Local variations in the availability of private providers would have to be considered in applying this generalized pattern to any specific area.

AC:rm
3/6/81

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This 1982 version will be substantially revised by early 1986. The revisions will be primarily in the areas of long term care standards, the elderly mentally ill, and children and youth.

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